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SOME LANDMARKS OF DEPARTMENT OF AGRICULTURE HISTORY

(Condensed Version)

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SOME LANDMARKS IN THE HISTORY OF THE DEPARTMENT OF AGRICULTURE

The United States Department of Agriculture grew directly out of the Patent Office which was established April 10, 1790. During the 1830's the newly reorganized Patent Office, then in the State Department, undertook to distribute seeds and collect agricultural statistics. Out of these activities developed the basis for a separate agency devoted exclusively to the interests of agriculture.

The first Patent Commissioner under this new law, Henry L. Ellsworth (1791-1858), was the son of the third Chief Justice of the United States Supreme Court, Oliver Ellsworth. He was born in Connecticut and graduated from Yale in 1810. Ellsworth practiced law, but he also farmed and was a leader in the Hartford County Agricultural Society. He became president of a large insurance company and was active in business and civic life. He resigned as mayor of Hartford in 1835 to become head of the Patent Office on June 15 of that year.

In his annual reports dated January 1, 1838 and 1840 respectively, he requested funds from congress to be used for collecting and distributing seeds and compiling agricultural statistics.

On May 15, 1862, President Abraham Lincoln signed the bill establishing what is now the United States Department of Agriculture as a separate agency with bureau status, headed by a commissioner of its own. On February 9, 1889 the Department was raised to Cabinet rank. Its supervising officer automatically became the Secretary of Agriculture.

At no time in its history could an observer survey the Department and show that it had sprung full-grown from the brow of the bureaucrat. A study of the Department's development reveals instead that its work was expanded by Congressional authorization at successive periods of the country's history, often because different groups of citizens demanded that something be done in the field of agriculture.

Emergencies, like those created by the rapid rise of technology, widespread animal or plant ills, insect infestations, dust storms, droughts, floods, the exploitation of forests, the necessity for better communication, or economic depressions compel the Government to take action in new fields.

There is nothing new about public aid to agriculture. For the farmer always battled the elements on a precarious basis, and far back in world history, before commercial farming became a reality, government had to aid him every now and then, if only to guarantee the food supply.

Organization and Study Lead to Changes

One of the first signs of the change in American agriculture was the establishment of agricultural and scientific societies by the so-called "gentlemen farmers." The Philadelphia Society for the Promotion of Agriculture was founded in 1785, and George Washington was elected an honorary member on July 4 that year. Washington consistently manifested great interest in agriculture and was often affectionately called "The Farmer of Mt. Vernon."

The suggestions made by Washington were favorably received by his Secretary of State and public men generally. So a committee of the House of Representatives recommended on January 11, 1797, that an agricultural board or society be created, that high Government officials be members ex-officio, and that it meet annually. The measure never came to a vote.

In 1819 the Secretary of the Treasury directed consuls to collect seeds, plants, and agricultural inventions for introduction into this country, although there was no appropriation for the purpose.

The agricultural societies were a chief means by which improvements were brought to the notice of farmers. In 1852 there were 300 active agricultural organizations, and by 1860 they numbered over a thousand. Closely related to

their spread was the rise of agricultural fairs and journals. Elkanah Watson held his first real agricultural fair in Pittsfield, Mass. on October 10, 1810, with 26 farmers participating. He then organized the Berkshire Agricultural Society to hold annual fairs, and thereafter fairs rapidly became institutionalized.

"The Agricultural Museum," believed to be the first farm journal in the country, was published in Georgetown, D. C., from 1810 to 1812 as the organ of the Columbian Society. Far more significant in its influence, however, was the "American Farmer" established at Baltimore in 1819 by John Skinner. Farm journals multiplied thereafter, appearing in every State, and all urged farmers to take up new and better methods of husbandry.

Congress also became aware of agriculture in this period, the House establishing a Committee on Agriculture in 1820 and the Senate one in 1825. In addition Congress in 1828 authorized the publication of a manual, prepared by Richard Rush, Secretary of the Treasury. It contained the best available information on the growth and manufacture of silk.

The development of the reaper, the steel plow, the threshing machine, and other implements around this time eventually produced great changes in agricultural technology and in the general economic and social organization as well. The farmer's investment in these machines made it essential for him to increase his income. Thus his dependence on the commercial market increased.

At the instance of Patent Commissioner Henry L. Ellsworth, President Van Buren in recommending that Congress widen the scope of the Sixth Census, induced that body on March 3, 1839 to permit the Patent Office to expend \$1,000 for the collection of agricultural statistics and for other agricultural purposes. It was natural in these early days that such work gravitate toward the Patent Office, for it was concerned with experimentation and the stimulation of enterprise and invention, and therefore with scientific progress in agriculture.

Governmental aid to agriculture was at last under way. The aid would progress from the increase to the regulation of production; from subsistence to commercial

agriculture; from self-reliance to considerable dependence on guidance by the Government; from the exploitation to the conservation of natural resources; from traditional guesswork to the application of practical scientific knowledge; from uncoordinated individual activity to well-coordinated group action through governmental aid, using the democratic process.

Every successive new function undertaken by the Department of Agriculture will be found outlined in an act of Congress. Hence the expression "The Department of Agriculture did so and so" could be interpreted as an abbreviated way of saying, "The Department of Agriculture, responding to public demand through the execution of work directed by an appropriate act of Congress authorizing this activity, did so and so."

Social and Economic Questions Attacked

At the turn of the century another group of problems appeared. They concerned social and economic questions associated with our decreasing farm exports and the ever-increasing use of agricultural technology. The farmer now needed assistance in his credit and marketing problems as well as in the formation and management of cooperatives. He required adult education in agricultural science which was provided by demonstration farms and later by the Extension Service.

World War I was a period of accelerated exports to Europe, speculative land values, greatly increased acreage in cultivation, and expanded use of Agricultural technology, with a great decrease in the number of horses and mules on farms. Thus millions of acres that had never been cultivated before were plowed up, while millions of other acres formerly used to pasture and grow feed for work animals became available for beef and dairy-herd production.

Return to Earlier Century

On July 4, 1836 when the Patent Office had become a separate bureau of the Government, it occupied rooms in ^{Blodgett's} / Hotel, a three-story building on E. Street, Northwest. In December of 1836 this building burned to the ground and all the patent records along with it. Only in 1840 did the Patent Office get its new building on F. Street, Northwest, now occupied by the headquarters of the Civil Service Commission.

During 1836 and 1837 Ellsworth, at his own expense and without Congressional authorization, had distributed seeds and plants that he received gratuitously for the purpose. Soon the function of seed distribution was to be regularized under Congressional authority. For a long time it consumed most of the Federal funds allocated to agriculture. Ultimately it became almost a disgrace, as certain heads of the Department declared. Congressional seed distribution was not ended finally until June 30, 1923.

Ellsworth felt there was great room for expanding research by selection among wheat varieties, some of which yielded as much as 20 percent more than others. He reported experiments carried on during the preceding summer which had indicated that the Indian corn crop could be improved in yield one-third simply by due regard for seed selection.

Ellsworth's account for 1839 occupied but two printed pages. Herein he remarked that: "The ordinary expenses of the Patent Office the past year, including payments for the library and agricultural statistics, were \$20,799.95."

Congress exhausted itself by its 1839 appropriation, and no grant was made for agricultural purposes in 1840 or in 1841. In 1842 another \$1,000 was made available and this sum was doubled in both 1843 and 1844. It rose to \$3,000 in 1845, but nothing was granted in 1846 and agricultural work was interrupted. There were no lapses thereafter, however.

Commissioner Ellsworth's Reports are of special interest both because of his lively intelligence and of his urgent desire to aid agriculture. His last one, dated January 28, 1845 (he relinquished office on April 30 of that year,) covered activities during 1844 and comprised a book of 520 pages with index. The Commissioner began by citing the low rates of pay in his office.

The Commissioner also mentioned the "electric fluid" again which was now achieving all sorts of things since it had been "confined and tamed." The telegraph annihilated distance. "Paper H" in the book detailed how Professor Page had telegraphed 40 miles. Elsewhere was published a letter from Professor Morse to the Secretary of the Treasury reporting upon the telegraphic transmission of the proceedings at the Democratic National Convention in Baltimore during May 1844. Morse also suggested that the Government take over this new medium of communication and operate it as it did the postal service.

Agriculture Now a Major Study

The science of agriculture had now become a major study in the Patent Office. Abandoned and worn-out lands were being reclaimed. Guesswork and hereditary notions were yielding to scientific analysis and the application of scientific principles. Science however must always persevere. Some scientists had at first claimed that cornstalk sugar was grape sugar, whereas additional tests had proved it to be "equal to the best muscovado sugar." Ells worth felt sure that good sugar would soon be produced by this method on a large scale. It never was.

Edmund Burke became Commissioner of Patents May 4, 1845 and held office till April 30, 1849. During his term the "Report" was greatly expanded and included tables of British and American imports and exports as well as English cotton quotations. In 1846 agricultural statistics were omitted for lack of an appropriation, but in 1847 they reappeared. In 1849 the Patent Office was placed in the

new Department of the Interior. In December 1849, President Zachery Taylor recommended the establishment of a Bureau of Agriculture in the new Department. His message declared that governmental assistance to agriculture was totally inadequate. Congress took no action.

Thomas Ewbank (1792-1870.) reporting for 1849, addressed himself to President Millard Fillmore. Ewbank served as Patent Commissioner from May 19, 1849 until November 8, 1852. Born in Durham, England, he began as an apprentice in the sheet metal trade. He came to this country in 1819 and was thereafter an inventor, manufacturer, and author. His primary interest was the industrial application of chemistry and physics.

At the direction of the Secretary of the Interior a "practical and scientific agriculturist" was hired to attend agricultural matters in the Patent Office and to prepare the separate agricultural "Report." Daniel Lee, M. D., was appointed. Ewbank omitted agricultural statistics from the volume because he said those hitherto published had been unreliable, and he therefore declined to "waste time and paper in printing crude guesses." He said that Congress or the State legislators should devise methods of getting good statistics worth printing.

Under date of February 28, 1853 Daniel Lee wrote on agricultural progress during the year, his main concern still being the conservation of our natural soil resources. He again accused the cities of seducing farmers into sending them their soil riches in the form of foods and breadstuffs. He said that no generation had the right to destroy the soil, a sentiment echoed by a few other far-sighted men many years afterwards.

Lee also insisted that we should have agricultural schools to teach our young the principles of soil-building science. He urged Congress to take action. It was about 1849 that Jonathan Turner of Illinois began his campaign for industrial universities. This was part of the long struggle for popular and agricultural education which finally culminated in the passage of the Land-Grant College Act of 1862.

Continued Flow of Patent Office Reports

Silas H. Hodges, who acted as Patent Commissioner from November 8, 1852 to March 25, 1853, apologized for the inferior character of Lee's agricultural Report that year. R. C. Weightman was Acting Commissioner from March 25 to May 15, 1853. On the next day Charles Mason became Commissioner, and he held office till August 4, 1857. He made Daniel Jay Browne the editor of agricultural reports and specified that statistics were to be omitted until reliable ones were collected.

Charles Mason (1804-82) was born in New York, attended West Point, and then turned to law and journalism. He became Chief Justice of the Supreme Court of Iowa Territory. After his retirement as Patent Commissioner he was a patent lawyer in Washington, D. C. but subsequently entered politics in Iowa. The Reports during his term of office contained fewer letters from correspondents and more learned essays of substantial character by writers like Joseph Henry and other distinguished men.

Samuel T. Shugert was in charge of the Patent Office until Joseph Holt (1807-94) became Commissioner, September 10, 1857 to March 14, 1859. Holt, a rather remarkable man was born in Kentucky. Buchanan appointed him Patent Commissioner for his aid in a great Democratic victory. He became Postmaster General of the United States in 1859 and was later the first Judge Advocate General and had much to do with the development of our military law and the supervision of court martial.

At this time various groups were agitating for agricultural colleges, free land, and more Federal aid for farmers. If Congress would not appropriate money for the colleges at least it should make provision for them in the form of public-land grants. Both movements hit upon the consistent opposition of the southern delegation to Congress which sincerely believed that the doctrine of States rights forbade any such Federal aids. One land-grant college bill did get through Congress during Buchanan's administration, but the President vetoed it because he thought that Federal grants to States were not only extravagant but unconstitutional.

William Darius Bishop (1827-1904,) born in New Jersey, and a former railroad official and member of Congress, was made Commissioner of Patents by President Buchanan March 23, 1859 and served until February 15, 1860, when he went back to railroading and politics. He was followed in office the next day by Philip F. Thomas. Thomas resigned December 13, 1860 without issuing a Report. The 1860 publication was edited by the "Superintendent of the Agricultural Division," Thomas G. Clemson, and from December 14, 1860 to March 28, 1861, S. T. Shugert was again Acting Commissioner.

It was maintained that the United States now needed much more than a mere Agricultural Division in the Patent Office. It now spent \$53,000 a year, had a superintendent, four clerks (including translators and writers,) a curator or gardener, and some aides for the latter.

Increased Recognition Urged

The Report for 1861 was issued in 1862 by the new Commissioner of Patents, David P. Holloway. It was the most complete agricultural manual so far issued by the Patent Office, but it contained no statistics other than a few on milk production. It consisted in the main of essays on the current progress of American Agriculture. There was less material extracted from journals, newspapers, and books. Holloway was appointed March 28, 1861 and served till August 16, 1865, after agriculture had left the Patent Office.

Holloway launched a prolonged and fervent plea for the establishment of an institution to serve agriculture in this country where three-fourths of the citizens were still farmers. He undoubtedly reflected a rising tide of public opinion or he would not have written as he did.

The United States Agricultural Society had been organized in 1852, and it ultimately became the most powerful force urging the establishment of a Federal

Department of Agriculture. A National Convention of Agriculturalists was called to meet in Washington June 24-25, 1852, and the agricultural society was formed as a result. A hundred and fifty delegates were present and Marshall P. Wilder was elected the society's president.

The organization rapidly drew into its membership the leading farmers of the Nation, and its journal was highly regarded and powerful. From the outset it urgently sought public assistance for farmers, and at each meeting it urged the establishment of a Department of Agriculture with a Cabinet officer at its head.

The United States Agricultural Society kept up continual pressure, especially through Charles B. Calvert of Maryland, its member, who was elected to Congress July 4, 1861 and placed on the Committee on Agriculture. Calvert worked for a department, not a bureau, though there was much hostility toward the idea of another Cabinet office being established. It was at one time suggested that the head of the department be elected by the farmers. Meanwhile Morrill was making headway on his land-grant college bill.

In 1859 an Advisory Board of Agriculturist met at the request of the House Committee on Agriculture and after discussion made a report recommending the creation of a Department of Agriculture with a Cabinet officer at its head. This report was suppressed though its main recommendation became known.

Should the new agency be a department or merely a bureau as Lincoln had suggested? Ultimately the House Committee on Agriculture decided in favor of a department in charge of a commissioner, and in such form the bill was finally enacted. It was felt that commercial and manufacturing interests were local in nature so they were omitted from consideration. It was stated they could easily combine among themselves and make their wants felt by the Government, while "Agriculture clad in homespun is very apt to be elbowed aside by capital."

Far-Reaching Agricultural Legislation Enacted in 1862

The fact that the Southern delegation no longer sat in Congress naturally facilitated the passage of the bill, because their passion for States rights might well have defeated it. President Lincoln signed the bill May 15, 1862 and it became law. On May 20, he signed the Homestead Act which made provision for apportioning freehold farms of 160 acres each from the public domain to citizens who would make homes on them and till them for 5 years. Then on July 2, 1862 Lincoln approved the Land-Grant College Act fathered by Senator Justin Smith Morrill of Vermont.

The last-named law endowed the colleges with 11,000,000 acres of public land, nearly twice the area of Vermont. The States were authorized to sell the land and use the proceeds to endow their respective agricultural colleges. The States were thereafter to operate the colleges themselves. The law is important constitutionally as marking a beginning of Federal grants-in-aid to the States.

Meanwhile the Department of Agriculture had its origin in the office of Commissioner of Patents Holloway, July 1, 1862, and Isaac Newton (1800-1867,) who since early 1861 had been in charge of the Agricultural Division, became the first Commissioner of Agriculture. It is of interest to observe that public farm aid was not a nationally pulse-quickenning subject in those days, and in the main the gentleman farmers led the agitation for the establishment of the Department.

There was considerable political inertia on the subject, and rural America largely held to the Jeffersonian maxim that the best was the least government. Senator Hale in discussing the proposed department in fact said that the prevailing farmer attitude was: "For Gos's sake let us alone!" There was no compact farm bloc, and professional consultants were not in agreement as to procedure.

The Department had mainly concerned itself with distributing seed, and largely lost the respect of agricultural scientists and journals. It did not appeal to

the actual soil cultivator or dirt farmer for many years. The Nation made no effort for sound land settlement or to control land speculation and exploitation. As a matter of fact no controls were lodged in the new Department. Food was needed for the Civil War, so an unnatural extension of farm-crop belts took place and new machinery was widely utilized. Economists of the day took the farmer for granted or ignored him.

The act establishing the Department of Agriculture in its preamble reads thus:

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, - That there is hereby established at the seat of Government of the United States a Department of Agriculture, the general designs and duties of which shall be to acquire and to diffuse among the people of the United States useful information on subjects connected with agriculture in the most general and comprehensive sense of that word, and to procure, propagate, and distribute among the people new and valuable seeds and plants.

The original act offers no evidence that any balanced social and economic program for agriculture was desired or much less visualized, at the time. Yet the law was very broad in scope. It gave the Department great latitude and discretion. Meanwhile it would appear that the Department has had ample legal authority for most of its subsequent activities. It is also of interest that the act prescribed the appointment of professionally qualified employees.

Isaac Newton, the first Commissioner of Agriculture, was born in New Jersey but grew up in Pennsylvania. He served from July 1, 1862 until his death in office on June 19, 1867. He was a Quaker of farmer stock and limited formal education. When he grew to maturity he managed two large farms in Delaware County, Pennsylvania, so well that they became celebrated as models. He became an active member of the Pennsylvania State Agricultural Society. In 1854 he purchased a thousand acres of land in Prince William County, Virginia, but the outbreak of the Civil War rendered this venture unsuccessful.

Newton was personally acquainted with Lincoln. One story has it that he delivered milk to the White House. Lincoln placed him successively in charge of agricultural work in the Patent Office and in the Department of Agriculture.

Early in 1863 Newton reported for the first time to President Lincoln. He began by quoting and discussing the organic act of his Department. He also reported that between July 1, 1862 and January 1, 1863 he had expended the sum of \$34,342.27, leaving an unexpended balance of his appropriation of \$25,657.73. He asked Congress to grant him \$130,000 for the fiscal year to end June 30, 1864, "which is deemed a low estimate."

Objectives of Department Take Shape

The earliest bound volume of Department of Agriculture publications now in the Department Library begins with a circular from the Commissioner himself on the "Present Agricultural, Mineral, and Manufacturing Condition and Resources of the United States," dated 1862. Next there is a "Catalogue of the Plants, Bulbs, Tubers, for Distribution from the U. S. Propagating Garden," with a report on the "Objects and Aims of the Garden" by its superintendent, William Saunders, dated the same year. Then follows the "Report on the Chemical Analysis of Grapes," by Chemist Charles M. Wetherill, who concluded that our wine grapes were as good as those of Europe. The Commissioner's report for 1863 contained meteorological data supplied by Joseph Henry of the Smithsonian Institution.

Newton mentioned buildings, but not until 1867 did Congress appropriate \$100,000 for building at 12th and B. Streets, Southwest. A stable was erected in 1879, and \$25,000 was appropriated to put up a building for the Seeds Division and the Division of Statistics in 1881. A green-house was erected in 1883,— no more new buildings until 1897.

The Commissioner recommended the founding of a library. One had been

started in the Patent Office in 1840 when a clerk was appointed to gather statistics and useful agricultural material. In 1869 the Department got these books and added them to its own inadequate library. This occupied the entire west end of the first floor of the new Department building. J. B. Russell, the first librarian, was appointed in 1871.

Jacob R. Dodge, who was appointed statistician in 1866, was distinguished in his specialty, and served the Department well for 24 years. Statistics were long regarded as almost a divine revelation and as constituting the physics and physiology of society. Investors and speculators spent huge sums to obtain figures from which to predict market fluctuations. They thought that reliable crop information would set the farmer right up in the world; and that he could foil speculators by withholding his crops from market till the right time. It was a beautiful theory but did not work, partly because too few farmers fully understood the implications of the statistics provided for them.

During the war there had been an era of prosperity in some areas. The Corn Belt had begun to be stabilized in the present area. Wisconsin and Illinois were still the chief wheat-producing States, but the Wheat Belt began to move generally across the Mississippi. The Cotton Belt had also begun to move westward, away from the exhausted lands of the Southeast.

On November 27, 1865 Commissioner Newton reported to President Johnson for 1865. It was a time for world expansion. Some departmental scientists had been sent to Europe and Asia to make observations, and they traveled very economically. In fact ^{Townsend} / Glover had attended the entomological exhibit in Paris at a cost of only \$500.

Chief Clerk John W. Stokes was Acting Commissioner from June 20, 1866 until December 4, 1867 when Horace Capron (1804-85) was appointed Commissioner. Capron was born in Massachusetts, but grew up in New York. In 1836 he erected a cotton mill at Laurel, Maryland, which he later made into a model factory. Upon his resignation as Commissioner June 27, 1871 he went abroad to become agricultural

adviser to the Japanese Government.

Commissioner Capron manifested considerable interest in steam plowing and reported 3,000 steam plows at work in England and only 2 in the United States. Later in the book appeared a 10-page article on the "History of American Inventions for Cultivation by Steam." It was written by a patent examiner and well illustrated. The new Commissioner said he had reorganized the Department, making drastic changes,. At this time, January 13, 1868, the Department had about 47 employees.

In 1868 Commissioner Capron could report to President Johnson that the new building was at last completed. It was of Renaissance architecture, 3 stories high, and 170 by 61 feet. Its steam-heating apparatus was reported to be in successful operation. Including furniture and laboratory equipment it had cost \$140,420. Reporting to President Grant for 1870 Commissioner Capron again protested the insufficient remuneration of his staff and asked much larger appropriations. He reported expenditures of \$169,175.24.

President Grant appointed Frederick Watts (1801-89) to succeed General Capron, and he took office August 1, 1871. Watts was born in Pennsylvania of Welsh extraction. He grew up on a farm and acquired a taste for and interest in farming. He studied law and was president of the Cumberland Valley Railroad Company from 1845 to 1871, but he had meanwhile engaged in scientific farming. Watts had experimented with various types of farm buildings and had organized farm societies. He was the first head of the Department to give attention to our timber supply. His reports are dated from 1871 to 1876.

Watts appointed the statistician, J. R. Dodge, to serve also as editor and the latter complained that it was very difficult to get properly qualified persons to compile and edit agricultural reports. The compensation, \$1,200 to \$1,800 a year, was insufficient to attract workers with broad agricultural experience and high literary attainments.

In 1872 the Department had an appropriation of \$197,070 of which all but

\$1,278.82 was expended, but that was said to be sufficient to cover outstanding bills and still leave a small margin for return to the Treasury. In 1873 the Commissioner spoke of the increasing importance of entomology, and noted the cost and extent of insect damage.

Chemist William McMurtrie, was devoting his time to agricultural products. Watts had been annoyed by private individuals who wanted the departmental chemist to test wine, patent medicines, and mine samples for them, and even to give them certificates of merit. Since there had been loud complaints about frauds in commercial fertilizers the chemist was told to analyze some of them and publish the results.

In 1872 when James M. Swank wrote his brief account of the Department's history and development, J. R. Dodge was statistician, William Saunders the superintendent of gardens, Townsend Glover entomologist, Ryland T. Brown chemist, George Vasey botanist, J. R. Russell librarian, and Andrew Glass superintendent of the seed room. The Department had 50 clerks and specialists and 50 messengers, laborers, and other employees.

President Hayes appointed William G. LeDuc (1823-1917) Commissioner of Agriculture on July 1, 1877. The latter was born in Ohio, the son of a French father who had come to the United States to help the colonists in the Revolutionary War. LeDuc had studied law, been admitted to the bar, and had become active in and around St. Paul in the development of the farm country. He served in the Union army and later entered railroading. As Commissioner he established a tea farm and was greatly interested in sugar beets, sorghum, and animal diseases, the last interest culminating in the Bureau of Animal Industry.

Commissioner LeDuc's first Annual Report was for 1877. In it he presented a table to show that the Department of Agriculture received small appropriations as compared with other Federal Government agencies.

In 1879 a Veterinary Division was established to carry out fully the work on animal diseases. Congress had also appropriated \$10,000 for study of the history

and habits of insects. Veterinarians contributed long articles on animal diseases in this 1879 volume. The last report submitted by LeDuc was that for 1880.

LeDuc also wrote that the departmental employees received lower pay than those doing similar work in other Departments. His distinguished chemist received only \$2,000 a year (when he got it) for his "laborious and valuable" services, whereas a chemist who worked a short while detecting fraud in sugar for the Treasury Department received four times that much.

Dr. George B. Loring (1817-91,) of Massachusetts, educated as a physician, but also a scientific farmer and a Victorian-type political orator, was appointed Commissioner of Agriculture by President Garfield, July 1, 1881. Loring had operated a stock farm and had done much to further agriculture throughout his life.

Loring's first volume bears the dates 1881 and 1882. D. E. Salmon, later to be first chief of the Bureau of Animal Industry, and already a distinguished scientist, was in charge of the Veterinary Division. Reports were printed by several veterinarians regarding contagious pleuropneumonia, and agitation was rife for Federal action.

Organization and Growth in 1883 and After

In 1883 the Department consisted of the Division of Gardens and Grounds; the Botanical Division; the Microscopic Division; the Chemical Division; the Entomological Division; the Division of Statistics; the Veterinary Division; the Forestry Division; and the Seed Division.

Not many years later Theobald Smith, F. L. Kilborne, and Cooper Curtice solved the cattle-tick fever puzzle in the Bureau of Animal Industry by proving that the tick was the transmitting agent. This was a fundamental medical discovery of far-reaching importance.

The first report of the Bureau of Animal Industry was in the main devoted to

contagious pleuropneumonia and cattle-tick or southern cattle fever. The bill creating the Bureau was introduced by William H. Hatch of Missouri. Its passage marked a notable extension in the interpretation of the general-welfare clause of the Constitution. Here was a problem that actually transcended the capacities of the States, and individual freedom had to be restricted by the Federal Government for the public welfare.

The Bureau stamped out contagious pleuropneumonia in 5 years, a world record for its control and a tremendous boon for livestock men. The Bureau thereafter performed a long line of outstanding scientific research on hog cholera, hookworm, bovine tuberculosis, anthrax, blackleg, cattle-tick fever, contagious abortion, and many other animal and fowl diseases.

We come now to the last Commissioner of Agriculture who was also the first Secretary of Agriculture, Norman J. Colman (1827-1911) of Missouri. He was appointed by President Cleveland to take office April 3, 1885, and his first Report is dated that year. Colman was born in New York; taught school, studied law, and fought in the Civil War. After the war he started "Colman's Rural World" in St. Louis. He was elected to the Missouri State legislature and manifested much interest in the State university and served in many agricultural organizations

Colman was appointed because of his broad knowledge of agricultural problems and was almost certainly the most competent head the Department had up to that time. He was largely instrumental in effecting the passage of the Hatch Act which founded the State agricultural experiment stations and gave the Department its second Bureau, the Office of Experiment Stations.

Largely through Colman's interest a meeting was held in 1883 to consider the establishment of State experiment stations with Federal aid and a permanent organization was effected at the third meeting in 1887 - the Association of American Agricultural Colleges and Experiment Stations. The agricultural societies, especially the Grange and similar agencies, clamored for action. On March 2, 1887 the Hatch Bill was passed establishing the first national system of agricultural

experiment stations in the world and setting up the Office of Experiment Stations in the Department of Agriculture to coordinate their efforts. This authorization of combined Federal and State work naturally required some departmental reorganization.

W. O. Atwater was made Chief of the Office of Experiment Stations and A. C. True was associated with him.

The Department had received scant praise in its career so far. The farmers could not well apply the knowledge they had received in the form in which they received it. That was a gap which the Extension Service filled a decade or so later. Congress must give the Department scope for educational, economic, and social as well as scientific functions.

Emphatic Agitation for Cabinet Rank

The 50th Congress (December 5, 1887 - March 3, 1889) was simply deluged with petitions and memorials asking that the Department be given Cabinet rank. This was not altogether new agitation; it had gone on periodically for 30 years. Bills had even been introduced and occasionally passed by the House of Representatives to give The Department cabinet rank. Finally the Hatch Bill was passed and signed. Commissioner Colman was nominated and on February 13 confirmed as the first Secretary of Agriculture. The sources of lawmaking are ^{very} clear in this instance. Congress created the Department of Agriculture because of the hard effort, ceaseless agitation, and widespread expression of views by those who favored such legislation.

Colman left office with Cleveland. The incoming President Harrison appointed Jeremiah M. Rusk (1830-93,) and he assumed office on March 7, 1889. Rusk had been born on a farm in Ohio, but in 1853 he went to Wisconsin to keep a tavern. This venture was a success so he started a stage line which was also profitable, and in time he became Governor of Wisconsin. His period as Secretary of Agriculture was

marked by the eradication of destructive cattle diseases, and the passage of legislation for the inspection of meat. Rusk's particular contribution was his recognition of the importance of publicity and his ability to engage the interest of the press in departmental activities.

Secretary Rusk promptly reorganized the Department. He retained direction of the executive work himself and placed the scientific work under the first Assistant Secretary provided by Congress, who was Edwin Willets. He set up a Division of Records and Editing and urged the frequent publication of the results of scientific work in clear language that practical farmers could readily understand. The publication of Farmers' Bulletins therefore began. Rusk also began a systematic investigation of foreign markets for American farm products. He indicated that our farm exports were not so profitable as they once were.

The Department of Agriculture consisted of the following branches in 1889: Division of Statistics; Division of Entomology; Division of Chemistry; Section of Silk Culture; Botanical Division; Section of Vegetable Pathology; Division of Economic Ornithology and Mammalogy; Division of Microscopy; Office of Experiment Stations; Forestry Division; Division of Gardens, Grounds, and Horticulture; Seed Division; Division of Pomology; Folding Room Library; Museum; Bureau of Animal Industry.

In 1891 the Weather Bureau became the Department's third unit of bureau status. It had been transferred from the War Department, because the public considered that civilian control would make it more useful to agriculture and commerce. Since the Department had long carried on meteorological work the transfer was appropriate.

Cleveland, returning to the Presidency, appointed J. Sterling Morton (1832-1902) Secretary of Agriculture. He assumed his post March 7, 1893. He was born in New York and enjoyed the "distinction" of having been expelled from the University of Michigan for his independence. He had located in Nebraska City where he became a politician and editor of a newspaper. Morton had long been a student of agriculture, and had owned and worked a Nebraska quarter-section. He had a passion for

tree planting and became the founder of Arbor Day. As Secretary he emphasized economy and so objected to free seed distribution that he actually put a stop to it at one time.

Reporting for 1893, the secretary advocated better departmental organization and gave some information about foreign agricultural departments. He said that the classified civil service was defective because there was too much injustice in rank and pay. Secretary Morton commented that the act creating the Department had provided it with no building. The main structure erected in 1867 to accommodate 50 people in 4 divisions was now far too small.

The formation of the Dairy Division and its initial operation were described in Morton's 1895 Report. Henry E. Alvord was its first chief. Civil Service status had been extended to the Department's 2,019 employees by Presidential order dated May 24, 1895, which included all of them except the Presidential employees and common laborers. The Department now had 429 female employees.

In his final statement, that for 1896, Morton recorded that the Department's annual appropriation was \$2,583,750.

The Secretary consistently operated the Department economically and turned money back to the Treasury. He was very hostile to seed distribution and insisted it be abolished, and had actually tried to stop seed distribution by injunction. Seeds to the amount of two million dollars in retail value had been sent out in competition with those sold by retail seedsmen. Later the seedsmen were given the business of making the distribution themselves which mollified them.

The Secretary gave the average age of the chief of his scientific bureaus as 42 years and 3 months, the oldest being 51 and the youngest 29. He said that their salaries of \$2,500 and the \$1,800 paid their first assistants were insufficient. Even the directors of the State experiment stations received more. Turn-over was high because the scientific staff was underpaid.

At this point Secretary Morton left office and James Wilson of Iowa was appointed his successor by President McKinley, taking office March 7, 1897.

Secretary Wilson (1836-1920) was born in Ayrshire, Scotland; he came to the United States in 1851 and chose farming as his life work. He early became a community leader in Tama County, Iowa, was elected to the legislature, and also served three terms in Congress. In 1891 he was made professor of agriculture and head of the experiment station in Iowa State College. Henry Wallace, father of Henry C. and grandfather of Henry A., suggested his name to President McKinley for Secretary of Agriculture. Wilson continued in office for 16 years, remaining under Presidents Theodore Roosevelt and William H. Taft.

Turn of Century Sees Great Advancement

Farm demonstration and cooperative extension work were undertaken during Secretary Wilson's term and a small army of experts and scientists was employed. The Department grew into a magnificent research regulatory, educational and custodial institution, each manifestation of growth representing an effort to provide the services demanded by the public and authorized by Congress. Not only did research in the natural sciences attain very high quality under Secretary Wilson, but social and economic studies advanced rapidly.

While James Wilson held office urban influences on rural life rapidly intensified. Means of transportation and communication vastly improved. The increasing manufacture of automobiles and the improvement of roads gave farmers new access to markets. Competition grew keener and farm credit became an acute problem. The numbers of people engaged in farming grew steadily less. In 1910, only 32.2 percent of all persons gainfully employed were in agriculture, and the estimated average equity of farm operators in the land they tilled was 50 percent.

In his report for 1899 Wilson started the custom of beginning with brief items summarizing the year's outstanding accomplishments. Atwater now had a flow of nutrition bulletins appearing, and Wiley reported on food preservatives. N. E.

Hansen, M. A. Carleton, Water T. Swingle, and David Fairchild were mentioned as plant explorers.

At the turn of the century in 1900 Secretary Wilson expressed his determination of bringing scientists to the aid of farm producers, and to this end 21,000,000 copies of departmental publications had been distributed.

In 1901 the Secretary effected the long-needed reorganization of related departmental units into bureaus. The Bureaus of Plant Industry, Chemistry, Forestry, and Soils were created with chiefs at \$5,000 each. B. T. Galloway became the first head of the Bureau of Plant Industry and Harvey W. Wiley headed the Bureau of Chemistry. Milton Whitney became chief of the Bureau of Soils which took over all work on soil curves, soil analysis, soil technology, and drainage investigations. Gifford Pinchot was made Forester.

Farm Demonstration Experiments Begin

In the report for 1902 we find first mention of the farm-demonstration experiments undertaken to show the value of using scientific cultivation methods on selected "demonstration" farms in various communities. This novel and important idea originated with Seaman A. Knapp of the Bureau of Plant Industry. Ultimately the Extension Service was organized to carry adult education in agriculture right to farmers on their own farms. At that time, though, agricultural editors and farmers' institutes were pioneering in this work that later became an organized governmental activity.

The appearance of the cotton boll weevil speeded Dr. Knapp's farm-demonstration work, as the weevil produced a crisis in cotton production. Texas especially appealed loudly for Federal aid. At one huge mass meeting in Dallas half a million dollars was demanded to fight the weevil. The farm-demonstration method proved an

ideal means of instruction. Dr. Knapp also won praise for the 250,000 acres of rice growing in Texas from varieties he had introduced.

In 1904 Secretary Wilson made reference to farmers as our greatest source of natural wealth and said that well-being was generally diffused among them. The Bureau of Entomology with L. O. Howard at its head had been established in accord with recommendations made the year before. It was aiding the rapid spread of farm-demonstration work to cope with the boll weevil. The Weather Bureau announced that it would interpret "the language of the sun" at Mt. Weather.

On February 1, 1905 custody of the national forests was transferred to the Department and fused with its Bureau of Forestry to form the Forest Service. The Bureau of Chemistry reported that it had lost many employees due to the low salaries paid. It was studying food poisons and standards and cooperating with the Postoffice Department in protecting the mails from makers of fake remedies. The Bureau of Statistics had considerably improved its crop reporting, and the Office of Road Inquiry became the Office of Public Roads.

In 1906 the Department reported an annual appropriation of \$7,175,690. There were 1,594 employees in Washington and 4,648 in the field. The new East and West Wings of the present Administration Building were nearly complete but by no means large enough.

Dr. Wiley had helped in effecting the passage of his Food and Drug Law on June 30, 1906 and the Bureau of Chemistry was charged with its enforcement. A force of chemists and inspectors had to be appointed, and before long the number of employees in the Bureau of Chemistry was doubled.

Agricultural science had enormously increased production, but this increase was accompanied by a reduction in farm exports and a diminishing rate of population growth. However, farmers could always provide sufficient food for our population, so the Secretary seemed satisfied with conditions. He praised farmer cooperatives as well as the rapid extension of the Farmers Cooperative Demonstration Work.

Country Life Commission a Landmark

President Theodore Roosevelt appointed his Country Life Commission in 1908. The Commission held 30 hearing throughout the nation. In various ways it sought aid from over 100,000 persons. Dr. L. H. Bailey of New York was its chairman. The other members were Henry Wallace of Iowa; Walter Hines Page, who later became war-time ambassador to Great Britain; Gifford Pinchot, the great Forester and later Governor of Pennsylvania; and Dr. Kenyon L. Butterfield of Massachusetts Agricultural College.

The Commission held that a new race of teachers should appear in the country and that a new rural clergy be trained. It suggested increased farmer cooperation, the promotion of rural social advantages, and the expanding of efforts to make country life more "gainful" and more rewarding. It recommended that inventory be taken of our rural resources from the soil up, that a united campaign be instituted for rural progress, and that the extension work be organized on a national basis through the State colleges of agriculture.

It was in 1908 as well that serious study of farm economics was undertaken in the Bureau of Plant Industry with W. A. Peek in charge. The subjects of investigation were farm accounts, farm records, and the economic value of using farm equipment.

By this time the Department was enforcing food, game, drug, bird, livestock, quarantine, and meat-inspection laws, and many others besides. Its work had to expand constantly, as Congress passed new laws and charged the Department with their enforcement.

Farm cooperative demonstration work was widespread now seven years after its inception, and farm children also were being organized in clubs. Farm economic studies continued in the Bureau of Plant Industry where "farm problem or extension work" began. Trained men were being sent out as teachers. W. J. Spillman

spread this farm demonstration work to the North and West; in 1911 he helped establish the first Farm Bureau. Bradford Knapp, son of Seaman A., carried on the farm cooperative demonstration work in the South.

Dynamic Era in The Department

It may truthfully be said that when Secretary Wilson left office with President Taft, a definite era in the history of the Department of Agriculture ended. The incoming President Woodrow Wilson appointed the historian, economist, financier, and former college president, David F. Houston, Secretary of Agriculture. The appointment was an appropriate one at this juncture of the Nation's agricultural affairs. Secretary Houston had received a master's degree in government at Harvard. He taught at the University of Texas after which he became president of the land-grant college of that State.

In general it may be said that Secretary Houston ushered in a period when the Department devoted much more attention than before to broad social and economic issues affecting farmers. As he said in his report for 1913: "We have unmistakably reached the period where we must think and plan." Nevertheless study of the evolution of agricultural policies indicates marked continuity throughout. When changes occur the new will be found to have its roots fixed firmly in the old--in some research or fact finding investigation that went on much earlier.

Houston realized that farm-management studies could no longer be carried on effectively in the frame of reference of the Bureau of Plant Industry. He recognized the great importance of the extension work and understood that it should function more independently. He asked and acted upon the advice of such men as Thomas N. Carver of Harvard, George F. Warren of Cornell, Andrew Boss of Minnesota, H. C. Taylor of Wisconsin, James A. Foord of Massachusetts Agricultural College, John I. Falconer of Ohio State, and Richard L. Adams of the University of Cali-

formia. He inaugurated the "New Freedom" period which actually extended to the death of Henry C. Wallace.

Finally Secretary Houston saw the necessity for greater centralization within the Department and set up a number of staff agencies to effect integration. Originally the Department consisted largely of independent research sections and divisions which generally pursued thier own ways.

In response to long-continued agitation and in recognitions of the new emphasis on distribution in agriculture, Congress had provided for specifically, in its appropriation for 1913-14, the acquiring and diffusing among the people, useful information on subjects connected with the marketing and distribution of farm products, and made \$10,000 immediately available. To carry out the intention of Congress Secretary Houston established the Office of Markets, attached directly to his office. Under the leadership of Charles J. Brand it rapidly became one of the spearheads in the vigorous attack on economic and social problems.

In 1914 the Office of Markets was assuming much enhanced importance. The Cotton Futures Act has been passed. Studies of rural credit were under way and better dissemination of information has been effected. The Smith-Lever Agricultural Extension Act was passed on May 8, 1914, and the Extension Service was being organized to carry out its provisions. It provided for the use of personal-contact teaching methods to be financed by the grants-in-aid. Formal agreements between the Department and the land-grant colleges had to be effected. The Office of Information was created.

By 1916 work on marketing, finance, and rural organization mapped in earlier reports, was well under way. Acts establishing standards for staple agricultural products shipped to market, as well as the grain futures, grain standards, warehousing, and Federal farm-loan and Federal-aid road laws had all been passed. The loan act was especially designed to create a banking system tailored to rural needs.

World War Brings Drastic Changes

By 1917 Houston was stressing all efforts to increase farm production for domestic use and export. The Food Administration was started with Herbert Hoover in charge. The cooperative Extension Service sprang into new usefulness in showing farmers how to increase food production to win the war. An additional appropriation of over 4 million dollars was made to expand this work. Farmers responded vigorously, struck the plow into land hitherto untilled, and won praise for it. Home economics work, Federal and State, increased in importance under impact of war conditions.

A record acreage had been planted by 1918 and crop yields had been stimulated in all practicable ways. Every agency was pushing this work. Authority was now granted to use motion pictures for purposes of agricultural education. Interest in farm land increased, land speculation got under way, and farm values shot up miraculously, tempting farmers to top-heavy mortgage indebtedness.

The day following Secretary Houston's resignation to become Secretary of the Treasury, February 2, 1920, Edwin T. Meredith, an Iowa Farm Editor, became Secretary of Agriculture. The latter served until March 4, 1921 and made the report for 1920, in which the farmers were still being praised for glorious wartime service. But Secretary Meredith advised farmers that they now faced a declining market, with shrinkage of land and other values, and the Secretary admitted that there was no simple solution for this complex problem. World conditions were chaotic.

In 1922 President Harding called an agricultural conference in Washington; the Grain Futures Act was also passed this year. The surplus became the chief agricultural problem; it was at first attacked as a marketing, and later as a marketing and production problem.

On March 5, 1921 President Harding appointed Henry C. Wallace, father of Henry A. Wallace, to be Secretary of Agriculture. In his first report, for 1921, Wallace

frankly recognized the dangerous nature of the farmer's position with overexpanded acreage, inflated land values and an uncertain foreign market confronting him, and an industrial depression under way. The farmer was said to produce on faith and take great risks, and his 1920 crops were produced at the greatest cost known.

Marketing was now seen to be an integral part of production, though scientific research was still regarded as basic, and a Director of Scientific Work was appointed. Henry C. Taylor became chief of the new Bureau of Agricultural Economics on July 1, 1922. Work in home economics was also still increasing in importance. Wallace warned that no new land should be opened to cultivation and recommended intensive, cost-lowering methods to farmers.

Secretary Wallace died in office October 25, 1924, and Assistant Secretary Howard M. Gore immediately became Acting Secretary. He was appointed Secretary of Agriculture November 22, 1924, and served until March 4, 1925 when he resigned to become Governor of West Virginia. The 1924 volume was prepared under the direction of Secretary Wallace; Gore transmitted it as Acting Secretary.

The Bureau of Dairying was established by act of Congress of May 29, 1924. The dairy industry had asked for the establishment of a bureau to consolidate work in this field.

It almost seemed as if the departmental research workers had overreached themselves. Set to lowering the unit costs of agricultural production and to improving yields, they had succeeded so admirably as to aid in producing enormous surpluses.

Only 21.5 percent of all our people gainfully employed were engaged in agriculture in 1930 and the estimated average equity of farm operators in the land they farmed was only 41 percent. The latter figure dropped to 39 percent 5 years later. The agricultural export market suffered increasingly serious competition; the day of loans to Europe had passed, and our own tariff walls not only effectively shut out foreign goods but stimulated similar action on the part of other nations. The

highly protective Hawley-Smoot Tariff Act was passed in 1930.

Industrial Prosperity Masks Real Conditions

On March 5, 1925, William M. Jardine, President of the Kansas State College of Agriculture, took office as Secretary of Agriculture and served until March 4, 1929. During his term ominous conditions in agriculture were somewhat masked by the spurious and highly specialized industrial and financial "prosperity."

Agricultural exports were said to have increased. The farm-credit situation was regarded as bad, the small farmer suffered, and local agricultural credit organizations were suggested as a remedy. In some regions it was held there was actually lack of confidence in future expansion.

Agricultural pressure groups also recommended the passage of laws to authorize the setting up of agricultural credit corporations and for expanding livestock grazing rights in national forests. Investigations were already under way on high freight rates and farm taxes, and it was insisted that the tax load must be in part removed from farm property. The Department also saw that it must aid in the business organization, management, and operation of farm cooperatives, as well as the education of farmers in regard to them.

In 1927 the farm problem was still acute. The Secretary suggested that wastes be cut, production costs diminished, the margin between producer's cost and consumer's purchasing price lessened, the costs of transportation and distribution reduced, the tax burden redistributed to help reduce the farmer's overhead, and that farmers cooperate to enhance their bargaining power. What should be done was clearly seen; how to do it remained puzzling.

Cooperative marketing had made progress, but united farmer action would be required to adjust production to demand. The problem of land utilization had assumed importance. This was directly counter to the traditional trend of individual

exploitation of land resources. We had more acres in cultivation now than we needed.

The cumulative pressure of agricultural problems increased continually. In 1929 general panic and depression burst on the country. Arthur M. Hyde, a former Governor of Missouri, became Secretary of Agriculture March 5, 1929 to serve until March 4, 1933. His first report reviewed the agricultural industry as a whole and the several crops specifically.

Meanwhile the Federal Farm Board had been organized. An adjunct of the Department, the Board had authority to create commodity stabilization corporations and to recognize and collaborate with farmer cooperatives. It could make loans from a half-billion-dollar revolving fund, but it had no control over production or acreage.

"The 1930 Drought" was the first subhead in Secretary Hyde's report for that year. The effects were so extended that relief would be required. The Red Cross had given aid, and Congress made emergency loans of 6 million dollars available both in 1929 and in 1930, although \$4,580,683 of the first 6 million dollars had already been repaid.

The Secretary contended once again that the tariff act of 1929 aided farmers by protecting their domestic market. On June 5, 1930 Congress provided for an expansion of the foreign agricultural service. The Bureau of Dairying was now the Bureau of Dairy Industry. The Grain Futures Administration made a separate report again. M. S. Eisenhower signed a report as Director of the Office of Information.

In the 1931 volume world influences were accused of depressing American agriculture which lacked a foreign market and was therefore surplus-burdened. Agriculture would positively benefit from the high tariff just as soon as we learned to quit producing for an export market that no longer existed.

The Department's basic task was still held to be scientific research, the results of which were not intended so much to stimulate production as to help balance supply and demand, guarantee the dependability of production, raise living

standards, and aid industry as a whole. This research also helped find new uses for agricultural commodities, thus founding new industries and spreading employment. It also improved the quality of commodities.

The Department had been a pioneer in developing wise land use policies; it had formulated the entire theory. A National Land Use Conference had been held in Chicago at its suggestion where all relevant ideas were discussed and programs were mapped out. The farm plant was still too large and land submarginal for agriculture simply contributed to tax delinquency, hence it must be kept out of cultivation. Soil erosion also must be stopped. Secretary Hyde said that the recommendations made by the conference on land use would be carried out.

Another Dynamic Period

On March 3, 1933 Henry A. Wallace, an Iowa farm editor and son of Henry C. Wallace, became Secretary of Agriculture and ushered in another dynamic period in its history. All that was done in this period of action, however, had roots in the research, the discussion, and the social and economic thinking carried on in the Department during the previous more static decade.

Congress accordingly passed the Agricultural Adjustment Act, approved May 12, 1933. Here again, it should be noted, there was no sharp break with the past. The ideas in that act had been mulled over frequently within as well as outside the Department. W. J. Spillman had some of the notions in his "Balancing the Farm Output" published in 1927, and M. L. Wilson, also previously an employee of the Department, was in part responsible for drafting the act. Howard R. Tolley and Charles J. Brand, also associated with the legislation, were not new to the Department.

Named as co-administrator of the Agricultural Adjustment Act with Mr. Brand, George N. Peek of Moline, Ill. had been another advocate of new methods of coping

with the farm surplus problem. These men, together with a Department economist, Mordecai Ezekiel, had much to do with pioneering the new era of adjustment and departure from precedent.

The Adjustment Act, as Secretary Wallace analyzed it in his first report, sought to raise the income of farmers in two ways. (1) Production was to be adjusted to demand. (2) The Secretary of Agriculture was to enter into marketing agreements with producers, processors, and distributors of agricultural products, in order to eliminate competitive wastes, improve trade practices, move surpluses into the market, and raise producers' prices.

The Agricultural Adjustment Act, generally referred to as the A.A.A. necessarily provoked thoughtful criticism as well as approval. In his report for 1935, Secretary Wallace considered a number of the issues that had been raised. He denied that the measure sought to create artificial scarcity. Given a rising demand for a particular commodity, production would be increased accordingly. The long-term objective of the program was to prevent recurring cycles of over and underproduction.

The Secretary reported that the stock of surpluses had been sharply reduced. This was due partly to the production curtailments of the national farm program. Another very important factor was the drought of 1934, which was the worst ever recorded in the United States. It extended over 75 percent of the country, severely affecting 27 States.

It was announced that several important changes had been made in the organization of the Department. The position of Under Secretary of Agriculture had been created and Rexford G. Tugwell appointed to fill the post. There was no longer to be a Director of Scientific Work, and an Office of Budget and Finance had been created.

In January 1936 the Supreme Court in the Hoosac Mills case invalidated the compulsory features of the Agricultural Adjustment Act. Congress thereupon passed the Soil Conservation and Domestic Allotment Act. The Annual Report for 1937 contains

a detailed description of this measure and the steps taken by the Department to enforce it. The discussion is prefaced by a noteworthy analysis of our national agricultural policy.

An altered economic world called for a new agricultural policy. But the link between the old and the new was direct and close. The old exploitation forced the new conservation. The Federal Farm Board, the McNary-Haugen plan, the A.A.A. programs, and the Soil Conservation and Domestic Allotment Act had one basic characteristic in common. They all recognized that modern problems cannot be solved by ancient formulas, and that agricultural policy today is necessarily in large measure the opposite of what it was in the period of the open frontier.

Secretary Wallace's final report cited the unpromising export outlook and the ominous rise of economic nationalism. It detailed the wide variety of defense functions the Department was performing and could perform. On September 4, 1940, Secretary Wallace resigned his post to become a candidate for the Vice Presidency. Under-Secretary Claude R. Wickard of Indiana became the next head of the Department.

It was the Agricultural Adjustment Act of May 12, 1933, which ushered in much new legislation that resulted in the setting up of the so-called "action agencies" of the Department. This act was designed to establish and maintain such balance between the production and consumption of agricultural commodities, and such marketing conditions therefor, as would reestablish prices to farmers at a level that would give farm products the purchasing power they had in specified earlier base periods. The base period for most commodities was 1909 to 1914.

Some of the legislative acts authorizing other parts of this action program were as follows: The Emergency Farm Mortgage Act of 1933; the Farm Credit Act of 1933; the Federal Farm Mortgage Corporation Act and the Jones-Costigan Sugar Act of 1934; the Soil Erosion Act of 1935; the Soil Conservation and Domestic Allotment Act, the Rural Electrification Act, and the Flood Control Act of 1936; the Agricultural Marketing Agreement legislation, the act placing the functions of the Federal Surplus Commodities Corporation in the Department, the Bankhead-Jones Farm Tenant

Act, the Norris-Doxey farm forestry legislation, the Pope-Jones water-facilities legislation, and the Sugar Act, all of 1937; and the Flood-Control Act, the Agricultural Adjustment Act, and the Federal Crop Insurance Act of 1938.

Some of these agencies were created as independent establishments and later came to the Department where some of them have since undergone changes in name and structure. The Farm Credit Administration was created in 1933, but became part of the Department only on July 1, 1939. The Rural Electrification Administration was set up as an independent agency on May 11, 1935, and came to the Department July 1, 1939. The Commodity Credit Corporation was established October 17, 1933, and was placed in the Department July 1, 1939.

Second World War

Secretary Wickard was an Indiana dirt farmer. He graduated from Purdue with a degree in animal husbandry and, even before that, began helping to operate the family farm settled by his great-grandfather in 1840. He continued to manage the farm after he came to Washington in 1933. Before that he had been a member of the Indiana State Legislature. He was a member of the National Corn-Hog Committee of Twenty-Five which helped establish the original corn-hog program of the Agricultural Adjustment Administration.

In 1935, Mr. Wickard became chief of the Agricultural Adjustment Administration corn-hog work, thus being the third future Secretary to work in the Department in a subordinate capacity before assuming that office. When the Agricultural Adjustment Administration's agricultural conservation program started in 1936, Mr. Wickard became assistant director of the North Central Division. He was appointed Under Secretary of Agriculture on February 1, 1940.

On March 29, 1943, Chester C. Davis became the first War Food Administrator,

serving until he resigned June 28, 1943; he was succeeded by Judge Marvin Jones, who served until the War Food Administration was recombined with the Department of Agriculture by Executive Order effective July 1, 1945. Mr. Wickard became head of the Rural Electrification Administration at this time.

An Office of Agricultural Defense (later War) Relations was set up in the Department on May 5, 1941, in response to a letter from the President. On July 5, Secretary's Memorandum No. 921, established State and county defense boards. On December 13, 1941, there was announced a major reorganization of the Department to streamline it for the war effort. This was validated by an Executive Order dated February 23, 1942. At this time three large administrations were established as follows: The Agricultural Conservation and Adjustment Administration was created by merging activities of the Agricultural Adjustment Administration (later Agricultural Adjustment Agency,) the Soil Conservation Service, the Federal Crop Insurance Corporation, and the Sugar Division.

The Agricultural Marketing Administration was created by merging the activities of the Surplus Marketing Administration, the Commodity Exchange Administration, the Agricultural Marketing Service, and the Consumers' Counsel Division of the Agricultural Adjustment Administration.

The Agricultural Research Administration was created by grouping the activities of seven old-line scientific bureaus and agencies concerned with research and regulatory work, four Regional Research Laboratories, and nine Bankhead-Jones Laboratories. The Agricultural Research Center at Beltsville, Md., was also placed under the supervision of the Administrator.

On June 9, 1942, the White House announced the appointment of a Combined Food Board, composed of the Secretary of Agriculture and the head of the British Food Mission. It was to effect planned and expeditious utilization of the food resources of the United Nations.

Streamling For War

Fundamental reorganization of the Department again took place as a result of the Executive Order, dated December 5. At that time the Food Production Administration and the Food Distribution Administration were established. These, with the Agricultural Research Administration, the Commodity Credit Corporation, the Forest Service, the Rural Electrification Administration, and the staff agencies, then constituted the Department.

Naturally the Secretary's wartime powers invested the Department with much more authority and importance than it had ever possessed hitherto. It began to touch the lives of every citizen and to assume a defense and later wartime role of the most critical character. Mr. Wickard's first annual report, submitted on November 1, 1941, was prefaced by a "postscript" announcing the Japanese attack on Pearl Harbor and our precipitation into World War II.

Gradually we began to produce what was needed for defense and war purposes, when needed, and in the quantity required. Farmers rose to new heights of efficiency each production year, the Department acting as over-all staff counselor and adviser. The Department became active in the fields of labor supply, plant site location, and transportation problems, and rendered assistance to farmers in procuring supplies and equipment, priorities and allocations.

A special far-reaching nutrition program was undertaken in foreknowledge that all our people must be reasonably well fed to meet the forthcoming emergency, and that we must also produce much food for our potential and probable allies. The war-time job of the Agricultural Adjustment Administration became greater than ever before. The year's production was outstandingly favorable and we entered the war far better fortified than we would have been had no national farm program existed.

Through the State and County War Boards the Department gave farmers technical aid, made arrangements about price supports and money payments, and generally

assisted them to fulfill their goal pledges. Every agency in the Department did its utmost to assist the Food for Freedom Program. Food conservation was stressed and scarce farm foods began to be allocated to specific needs. A research food-dehydration project soon showed the way to save cargo space and get more actual food value abroad more rapidly than ever.

WAR FOOD ADMINISTRATION

For war purposes the program agencies of the Department of Agriculture were grouped into two administrative units, each headed by an official appointed by and directly responsible to the President. The agencies in the War Food Administration were responsible to the War Food Administrator. The Agricultural Research Administration, Farm Credit Administration, Rural Electrification Administration, and Forest Service were responsible to the Secretary of Agriculture.

On April 30, 1943, the War Food Administration announced an organization to administer the farm labor program. The Director of the Extension Service became responsible for mobilizing farm labor for use within each State, and for the placing of all workers needed on farms to meet local labor needs.

An Office of Materials and Facilities, to aid farmers with their procurement problems, was established May 10, 1943, by War Food Administrator's Memorandum No. 4. The War Meat Board was established May 15, 1943, to facilitate the handling of the Nation's meat supply.

A Director of Transportation was appointed May 26, 1943. On August 25, 1943, the War Food Administration announced the establishment, effective September 1, of a National War Board.

The following changes in names of some old-line Department bureaus should also be mentioned. In February 1943, certain organizational and structural shifts were

made in the bureaus comprising the Agricultural Research Administration in the course of which the Bureau of Home Economics with the addition of the Division of Protein and Nutrition Research, formerly of the Bureau of Agricultural Chemistry and Engineering, became the Bureau of Human Nutrition and Home Economics; the Bureau of Agricultural Chemistry and Engineering became the Bureau of Agricultural and Industrial Chemistry, with the four Regional Research Laboratories now comprising most of it; and the Bureau of Plant Industry became the Bureau of Plant Industry, Soils and Agricultural Engineering.

Greater and Greater Food Production

During 1943 farm food production, as well as farm production generally, again set a record. The Department and the War Food Administration regarded food as a munition of war.

A new farm production record was set for 1943 and new goals were developed for 1944. The price stabilization problem occupied much attention. The Commodity Credit Corporation greatly expanded its operations in response to wartime emergency needs. Government food procurement was stepped up enormously and rationing was applied to a number of foods.

Peace and the World View

The world viewpoint assumed by the Department is significant of the way in which science had shrunk distances. Agriculture now had to be considered, not only in relation to domestic industry, but in the light of world finance and the plans of the United Nations as well. The world organizations of agriculture came into the picture with the meeting of the United Nations Food and Agriculture Conference,

at Hot Springs, Va. in May and June 1943. The constitution for the Food and Agriculture Organization was already being proposed.

During the war many new discoveries and ideas, ranging all the way from the natural to the social sciences, which had resulted from research, but were restrained from full utilization by the long depression, came into their own and could be used at top efficiency. Among these were better varieties of plants and animals, better protection from insect pests and plant and animal diseases, expanding mechanization, improved cultural and fertilizing methods, increased storage of fertility in the soil by the widespread use of conservation measures, the farm security device of supervised loans which gave borrowers funds and expert advice together in one package, and the use of price incentives and other economic devices to get the needed crops at the right time.

But, as peace approached, War Food Administrator Jones saw the need for reorganization and reconsolidation, and he resigned and returned to the bench that this might take place. Secretary Wickard at the same time became head of the Rural Electrification Administration.

On July 1, 1945, Clinton P. Anderson took office as Secretary, to have charge of both the Department of Agriculture and the War Food Administration, and to consolidate and organize them as he thought best. He regarded himself as primarily a businessman rather than a farmer, though he grew up on a farm, and also operated 800 acres of irrigated land in New Mexico as a dairy enterprise. In addition, he retained direction of the home farm of 640 acres, near Mitchell, S. Dak. At the time of his appointment he was a member of the U. S. House of Representatives, serving his third term, and had been chairman of a committee investigating food shortages. Born at Centerville, S. Dak., he was educated at Dakota Wesleyan and at Michigan universities. The first job facing him was departmental reorganization.

On June 29, 1945, the President, by Executive Order No. 9577, provided for the abolition of the War Food Administration and for the transfer of its functions to the Department of Agriculture. In Memorandum No. 1106, July 3, 1945, the Secretary

announced the appointment of a Committee on Reorganization, Milton S. Eisenhower, chairman. Its duty was to confer with all agency heads, and so to integrate the War Food Administration and the Department of Agriculture as to avoid overlapping, duplication, and inefficiency in service to the public. Secretary's Memorandum No. 1118, August 18, 1945, announced the establishment of a Production and Marketing Administration which was, in effect, a consolidation of many agencies.

Famine Overseas and Its Relief

The President's 9-point Famine Relief Program was announced February 6, 1946, and the Department immediately began to take steps to launch it. Review of the Department's food programs was ordered February 15 and revision of 1946 farm-production goals on February 21.

The Famine Emergency Committee, after an all-day session at the Department, announced on March 11, its specific recommendations for the conservation of wheat, wheat products, and food fats and oils.

On April 9, a report by Herbert Hoover to the Famine Emergency Committee on European food needs was released and the next day the Secretary issued a call for world aid in the food fats and oils crisis.

New Legislation

The Research and Marketing Act, which became law August 14, 1946, provided for extension and expansion of Department research programs. The Farmers Home Administration Act became law the same day, abolishing the Farm Security Administration as such, establishing the Farmers Home Administration, and giving it various functions and responsibilities, including some which formerly lodged in the

Farm Credit Administration.

In late 1946 an outbreak of foot-and-mouth disease was discovered in the Republic of Mexico and it rapidly spread over that country. Special legislation and the consent of the Mexican Government enabled the United States to cooperate with her nearby neighbor in efforts to stamp out the infection before it reached our livestock. This campaign began in 1947.

From the beginning to the end of his administration Secretary Anderson called for practically all-out farm production; this he did regardless of what curtailment plans industry might undertake. He consistently praised the ability, industry, and integrity of the Department's information work and differentiated sharply between it and propaganda. He resigned May 10, 1948, to run for the Senate.

Further Changes

Secretary Anderson was succeeded in office by his own Assistant Secretary, Charles F. Brannan, a career employee he highly recommended for the office. A native of Denver who graduated from the University of Denver Law School, Mr. Brannan specialized in irrigation and mining cases in private practice until he became an assistant regional attorney for the Resettlement Administration, in 1935. Two years later he became Regional Attorney for the Department's Office of the Solicitor, with headquarters still in Denver.

In 1941, Mr. Brannan became Regional Director of Farm Security Administration for Colorado, Wyoming, and Montana, still in his native city.

In 1944 he was called to Washington to become Assistant Administrator of Farm Security Administration, and was appointed Assistant Secretary of Agriculture two months later. As Vice Chairman of the Department's Program and Policy Committee he had much to do with formulating and carrying out policies, and he presented the Department's long-range agricultural program to Congress, in 1947.

The account ends just after Secretary Brannan assumed office on June 2, 1948, in the original document.

Historic, archived document

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UNITED STATES DEPARTMENT OF AGRICULTURE
Office of Information

SOME LANDMARKS OF DEPARTMENT OF AGRICULTURE HISTORY

(Condensed Version)

Excerpts herein are based on Agriculture History Series No. 2, as
issued by the Department Committee
on Agricultural History

FILED 1953

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Abridged as USDA Document No. 8

1. The first part of the document discusses the importance of maintaining accurate records of all transactions. It emphasizes that this is crucial for the company's financial health and for providing reliable information to stakeholders.

2. The second part of the document outlines the procedures for handling customer inquiries. It states that all inquiries should be handled promptly and professionally, and that the company should strive to provide excellent customer service at all times.

3. The third part of the document discusses the company's commitment to environmental sustainability. It states that the company will continue to implement measures to reduce its carbon footprint and to promote sustainable practices throughout its operations.

SOME LANDMARKS IN THE HISTORY OF THE DEPARTMENT OF AGRICULTURE

The United States Department of Agriculture grew directly out of the Patent Office which was established April 10, 1790. During the 1830's the newly reorganized Patent Office, then in the State Department, undertook to distribute seeds and collect agricultural statistics. Out of these activities developed the basis for a separate agency devoted exclusively to the interests of agriculture.

The first Patent Commissioner under this new law, Henry L. Ellsworth (1791-1858), was the son of the third Chief Justice of the United States Supreme Court, Oliver Ellsworth. He was born in Connecticut and graduated from Yale in 1810. Ellsworth practiced law, but he also farmed and was a leader in the Hartford County Agricultural Society. He became president of a large insurance company and was active in business and civic life. He resigned as mayor of Hartford in 1835 to become head of the Patent Office on June 15 of that year.

In his annual reports dated January 1, 1838 and 1840 respectively, he requested funds from congress to be used for collecting and distributing seeds and compiling agricultural statistics.

On May 15, 1862, President Abraham Lincoln signed the bill establishing what is now the United States Department of Agriculture as a separate agency with bureau status, headed by a commissioner of its own. On February 9, 1889 the Department was raised to Cabinet rank. Its supervising officer automatically became the Secretary of Agriculture.

At no time in its history could an observer survey the Department and show that it had sprung full-grown from the brow of the bureaucrat. A study of the Department's development reveals instead that its work was expanded by Congressional authorization at successive periods of the country's history, often because different groups of citizens demanded that something be done in the field of agriculture.

Emergencies, like those created by the rapid rise of technology, widespread animal or plant ills, insect infestations, dust storms, droughts, floods, the exploitation of forests, the necessity for better communication, or economic depressions compel the Government to take action in new fields.

There is nothing new about public aid to agriculture. For the farmer always battled the elements on a precarious basis, and far back in world history, before commercial farming became a reality, government had to aid him every now and then, if only to guarantee the food supply.

Organization and Study Lead to Changes

One of the first signs of the change in American agriculture was the establishment of agricultural and scientific societies by the so-called "gentlemen farmers." The Philadelphia Society for the Promotion of Agriculture was founded in 1785, and George Washington was elected an honorary member on July 4 that year. Washington consistently manifested great interest in agriculture and was often affectionately called "The Farmer of Mt. Vernon."

The suggestions made by Washington were favorably received by his Secretary of State and public men generally. So a committee of the House of Representatives recommended on January 11, 1797, that an agricultural board or society be created, that high Government officials be members *ex-officio*, and that it meet annually. The measure never came to a vote.

In 1819 the Secretary of the Treasury directed consuls to collect seeds, plants, and agricultural inventions for introduction into this country, although there was no appropriation for the purpose.

The agricultural societies were a chief means by which improvements were brought to the notice of farmers. In 1852 there were 300 active agricultural organizations, and by 1860 they numbered over a thousand. Closely related to

their spread was the rise of agricultural fairs and journals. Elkanah Watson held his first real agricultural fair in Pittsfield, Mass. on October 10, 1810, with 26 farmers participating. He then organized the Berkshire Agricultural Society to hold annual fairs, and thereafter fairs rapidly became institutionalized.

"The Agricultural Museum," believed to be the first farm journal in the country, was published in Georgetown, D. C., from 1810 to 1812 as the organ of the Columbian Society. Far more significant in its influence, however, was the "American Farmer" established at Baltimore in 1819 by John Skinner. Farm journals multiplied thereafter, appearing in every State, and all urged farmers to take up new and better methods of husbandry.

Congress also became aware of agriculture in this period, the House establishing a Committee on Agriculture in 1820 and the Senate one in 1825. In addition Congress in 1828 authorized the publication of a manual, prepared by Richard Rush, Secretary of the Treasury. It contained the best available information on the growth and manufacture of silk.

The development of the reaper, the steel plow, the threshing machine, and other implements around this time eventually produced great changes in agricultural technology and in the general economic and social organization as well. The farmer's investment in these machines made it essential for him to increase his income. Thus his dependence on the commercial market increased.

At the instance of Patent Commissioner Henry L. Ellsworth, President Van Buren, in recommending that Congress widen the scope of the Sixth Census, induced that body on March 3, 1839 to permit the Patent Office to expend \$1,000 for the collection of agricultural statistics and for other agricultural purposes. It was natural in these early days that such work gravitate toward the Patent Office, for it was concerned with experimentation and the stimulation of enterprise and invention, and therefore with scientific progress in agriculture.

Governmental aid to agriculture was at last under way. The aid would progress from the increase to the regulation of production; from subsistence to commercial

agriculture; from self-reliance to considerable dependence on guidance by the Government; from the exploitation to the conservation of natural resources; from traditional guesswork to the application of practical scientific knowledge; from uncoordinated individual activity to well-coordinated group action through governmental aid, using the democratic process.

Every successive new function undertaken by the Department of Agriculture will be found outlined in an act of Congress. Hence the expression "The Department of Agriculture did so and so" could be interpreted as an abbreviated way of saying, "The Department of Agriculture, responding to public demand through the execution of work directed by an appropriate act of Congress authorizing this activity, did so and so."

Social and Economic Questions Attacked

At the turn of the century another group of problems appeared. They concerned social and economic questions associated with our decreasing farm exports and the ever-increasing use of agricultural technology. The farmer now needed assistance in his credit and marketing problems as well as in the formation and management of cooperatives. He required adult education in agricultural science which was provided by demonstration farms and later by the Extension Service.

World War I was a period of accelerated exports to Europe, speculative land values, greatly increased acreage in cultivation, and expanded use of Agricultural technology, with a great decrease in the number of horses and mules on farms. Thus millions of acres that had never been cultivated before were plowed up, while millions of other acres formerly used to pasture and grow feed for work animals became available for beef and dairy-herd production.

Return to Earlier Century

On July 4, 1836 when the Patent Office had become a separate bureau of the Government, it occupied rooms in ^{Blodgett's} Hotel, a three-story building on E. Street, Northwest. In December of 1836 this building burned to the ground and all the patent records along with it. Only in 1840 did the Patent Office get its new building on F. Street, Northwest, now occupied by the headquarters of the Civil Service Commission.

During 1836 and 1837 Ellsworth, at his own expense and without Congressional authorization, had distributed seeds and plants that he received gratuitously for the purpose. Soon the function of seed distribution was to be regularized under Congressional authority. For a long time it consumed most of the Federal funds allocated to agriculture. Ultimately it became almost a disgrace, as certain heads of the Department declared. Congressional seed distribution was not ended finally until June 30, 1923.

Ellsworth felt there was great room for expanding research by selection among wheat varieties, some of which yielded as much as 20 percent more than others. He reported experiments carried on during the preceding summer which had indicated that the Indian corn crop could be improved in yield one-third simply by due regard for seed selection.

Ellsworth's account for 1839 occupied but two printed pages. Herein he remarked that: "The ordinary expenses of the Patent Office the past year, including payments for the library and agricultural statistics, were \$20,799.95."

Congress exhausted itself by its 1839 appropriation, and no grant was made for agricultural purposes in 1840 or in 1841. In 1842 another \$1,000 was made available and this sum was doubled in both 1843 and 1844. It rose to \$3,000 in 1845, but nothing was granted in 1846 and agricultural work was interrupted. There were no lapses thereafter, however.

Commissioner Ellsworth's Reports are of special interest both because of his lively intelligence and of his urgent desire to aid agriculture. His last one, dated January 28, 1845 (he relinquished office on April 30 of that year,) covered activities during 1844 and comprised a book of 520 pages with index. The Commissioner began by citing the low rates of pay in his office.

The Commissioner also mentioned the "electric fluid" again which was now achieving all sorts of things since it had been "confined and tamed." The telegraph annihilated distance. "Paper H" in the book detailed how Professor Page had telegraphed 40 miles. Elsewhere was published a letter from Professor Morse to the Secretary of the Treasury reporting upon the telegraphic transmission of the proceedings at the Democratic National Convention in Baltimore during May 1844. Morse also suggested that the Government take over this new medium of communication and operate it as it did the postal service.

Agriculture Now a Major Study

The science of agriculture had now become a major study in the Patent Office. Abandoned and worn-out lands were being reclaimed. Guesswork and hereditary notions were yielding to scientific analysis and the application of scientific principles. Science however must always persevere. Some scientists had at first claimed that cornstalk sugar was grape sugar, whereas additional tests had proved it to be "equal to the best muscovado sugar." Ells worth felt sure that good sugar would soon be produced by this method on a large scale. It never was.

Edmund Burke became Commissioner of Patents May 4, 1845 and held office till April 30, 1849. During his term the "Report" was greatly expanded and included tables of British and American imports and exports as well as English cotton quotations. In 1846 agricultural statistics were omitted for lack of an appropriation, but in 1847 they reappeared. In 1849 the Patent Office was placed in the

new Department of the Interior. In December 1849, President Zachery Taylor recommended the establishment of a Bureau of Agriculture in the new Department. His message declared that governmental assistance to agriculture was totally inadequate. Congress took no action.

Thomas Ewbank (1792-1870.) reporting for 1849, addressed himself to President Millard Fillmore. Ewbank served as Patent Commissioner from May 19, 1849 until November 8, 1852. Born in Durham, England, he began as an apprentice in the sheet-metal trade. He came to this country in 1819 and was thereafter an inventor, manufacturer, and author. His primary interest was the industrial application of chemistry and physics.

At the direction of the Secretary of the Interior a "practical and scientific agriculturist" was hired to attend agricultural matters in the Patent Office and to prepare the separate agricultural "Report." Daniel Lee, M. D., was appointed. Ewbank omitted agricultural statistics from the volume because he said those hitherto published had been unreliable, and he therefore declined to "waste time and paper in printing crude guesses." He said that Congress or the State legislators should devise methods of getting good statistics worth printing.

Under date of February 28, 1853 Daniel Lee wrote on agricultural progress during the year, his main concern still being the conservation of our natural soil resources. He again accused the cities of seducing farmers into sending them their soil riches in the form of foods and breadstuffs. He said that no generation had the right to destroy the soil, a sentiment echoed by a few other farsighted men many years afterwards.

Lee also insisted that we should have agricultural schools to teach our young the principles of soil-building science. He urged Congress to take action. It was about 1849 that Jonathan Turner of Illinois began his campaign for industrial universities. This was part of the long struggle for popular and agricultural education which finally culminated in the passage of the Land-Grant College Act of 1862.

Continued Flow of Patent Office Reports

Silas H. Hodges, who acted as Patent Commissioner from November 8, 1852 to March 25, 1853, apologized for the inferior character of Lee's agricultural Report that year. R. C. Weightman was Acting Commissioner from March 25 to May 15, 1853. On the next day Charles Mason became Commissioner, and he held office till August 4, 1857. He made Daniel Jay Browne the editor of agricultural reports and specified that statistics were to be omitted until reliable ones were collected.

Charles Mason (1804-82) was born in New York, attended West Point, and then turned to law and journalism. He became Chief Justice of the Supreme Court of Iowa Territory. After his retirement as Patent Commissioner he was a patent lawyer in Washington, D. C. but subsequently entered politics in Iowa. The Reports during his term of office contained fewer letters from correspondents and more learned essays of substantial character by writers like Joseph Henry and other distinguished men.

Samuel T. Shugert was in charge of the Patent Office until Joseph Holt (1807-94) became Commissioner, September 10, 1857 to March 14, 1859. Holt, a rather remarkable man was born in Kentucky. Buchanan appointed him Patent Commissioner for his aid in a great Democratic victory. He became Postmaster General of the United States in 1859 and was later the first Judge Advocate General and had much to do with the development of our military law and the supervision of court martial

At this time various groups were agitating for agricultural colleges, free land, and more Federal aid for farmers. If Congress would not appropriate money for the colleges at least it should make provision for them in the form of public land grants. Both movements hit upon the consistent opposition of the southern delegation to Congress which sincerely believed that the doctrine of States rights forbade any such Federal aids. One land-grant college bill did get through Congress during Buchanan's administration, but the President vetoed it because he thought that Federal grants to States were not only extravagant but unconstitutional.

William Darius Bishop (1827-1904,) born in New Jersey, and a former railroad official and member of Congress, was made Commissioner of Patents by President Buchanan March 23, 1859 and served until February 15, 1860, when he went back to railroading and politics. He was followed in office the next day by Philip F. Thomas. Thomas resigned December 13, 1860 without issuing a Report. The 1860 publication was edited by the "Superintendent of the Agricultural Division," Thomas G. Clemson, and from December 14, 1860 to March 28, 1861, S. T. Shugert was again Acting Commissioner.

It was maintained that the United States now needed much more than a mere Agricultural Division in the Patent Office. It now spent \$53,000 a year, had a superintendent, four clerks (including translators and writers,) a curator or gardener, and some aides for the latter.

Increased Recognition Urged

The Report for 1861 was issued in 1862 by the new Commissioner of Patents, David P. Holloway. It was the most complete agricultural manual so far issued by the Patent Office, but it contained no statistics other than a few on milk production. It consisted in the main of essays on the current progress of American Agriculture. There was less material extracted from journals, newspapers, and books. Holloway was appointed March 28, 1861 and served till August 16, 1865, after agriculture had left the Patent Office.

Holloway launched a prolonged and fervent plea for the establishment of an institution to serve agriculture in this country where three-fourths of the citizens were still farmers. He undoubtedly reflected a rising tide of public opinion or he would not have written as he did.

The United States Agricultural Society had been organized in 1852, and it ultimately became the most powerful force urging the establishment of a Federal

Department of Agriculture. A National Convention of Agriculturalists was called to meet in Washington June 24-25, 1852, and the agricultural society was formed as a result. A hundred and fifty delegates were present and Marshall P. Wilder was elected the society's president.

The organization rapidly drew into its membership the leading farmers of the Nation, and its journal was highly regarded and powerful. From the outset it urgently sought public assistance for farmers, and at each meeting it urged the establishment of a Department of Agriculture with a Cabinet officer at its head.

The United States Agricultural Society kept up continual pressure, especially through Charles B. Calvert of Maryland, its member, who was elected to Congress July 4, 1861 and placed on the Committee on Agriculture. Calvert worked for a department, not a bureau, though there was much hostility toward the idea of another Cabinet office being established. It was at one time suggested that the head of the department be elected by the farmers. Meanwhile Morrill was making headway on his land-grant college bill.

In 1859 an Advisory Board of Agriculturist met at the request of the House Committee on Agriculture and after discussion made a report recommending the creation of a Department of Agriculture with a Cabinet officer at its head. This report was suppressed though its main recommendation became known.

Should the new agency be a department or merely a bureau as Lincoln had suggested? Ultimately the House Committee on Agriculture decided in favor of a department in charge of a commissioner, and in such form the bill was finally enacted. It was felt that commercial and manufacturing interests were local in nature so they were omitted from consideration. It was stated they could easily combine among themselves and make their wants felt by the Government, while "Agriculture clad in homespun is very apt to be elbowed aside by capital."

Far-Reaching Agricultural Legislation Enacted in 1862

The fact that the Southern delegation no longer sat in Congress naturally facilitated the passage of the bill, because their passion for States rights might well have defeated it. President Lincoln signed the bill May 15, 1862 and it became law. On May 20, he signed the Homestead Act which made provision for apportioning freehold farms of 160 acres each from the public domain to citizens who would make homes on them and till them for 5 years. Then on July 2, 1862 Lincoln approved the Land-Grant College Act fathered by Senator Justin Smith Morrill of Vermont.

The last-named law endowed the colleges with 11,000,000 acres of public land, nearly twice the area of Vermont. The States were authorized to sell the land and use the proceeds to endow their respective agricultural colleges. The States were thereafter to operate the colleges themselves. The law is important constitutionally as marking a beginning of Federal grants-in-aid to the States.

Meanwhile the Department of Agriculture had its origin in the office of Commissioner of Patents Holloway, July 1, 1862, and Isaac Newton (1800-1867,) who since early 1861 had been in charge of the Agricultural Division, became the first Commissioner of Agriculture. It is of interest to observe that public farm aid was not a nationally pulse-quickenning subject in those days, and in the main the gentleman farmers led the agitation for the establishment of the Department.

There was considerable political inertia on the subject, and rural America largely held to the Jeffersonian maxim that the best was the least government. Senator Hale in discussing the proposed department in fact said that the prevailing farmer attitude was: "For Gos's sake let us alone!" There was no compact farm bloc, and professional consultants were not in agreement as to procedure.

The Department had mainly concerned itself with distributing seed, and largely lost the respect of agricultural scientists and journals. It did not appeal to

the actual soil cultivator or dirt farmer for many years. The Nation made no effort for sound land settlement or to control land speculation and exploitation. As a matter of fact no controls were lodged in the new Department. Food was needed for the Civil War, so an unnatural extension of farm-crop belts took place and new machinery was widely utilized. Economists of the day took the farmer for granted or ignored him.

The act establishing the Department of Agriculture in its preamble reads thus:

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, - That there is hereby established at the seat of Government of the United States a Department of Agriculture, the general designs and duties of which shall be to acquire and to diffuse among the people of the United States useful information on subjects connected with agriculture in the most general and comprehensive sense of that word, and to procure, propagate, and distribute among the people new and valuable seeds and plants.

The original act offers no evidence that any balanced social and economic program for agriculture was desired or much less visualized, at the time. Yet the law was very broad in scope. It gave the Department great latitude and discretion. Meanwhile it would appear that the Department has had ample legal authority for most of its subsequent activities. It is also of interest that the act prescribed the appointment of professionally qualified employees.

Isaac Newton, the first Commissioner of Agriculture, was born in New Jersey but grew up in Pennsylvania. He served from July 1, 1862 until his death in office on June 19, 1867. He was a Quaker of farmer stock and limited formal education. When he grew to maturity he managed two large farms in Delaware County, Pennsylvania, so well that they became celebrated as models. He became an active member of the Pennsylvania State Agricultural Society. In 1854 he purchased a thousand acres of land in Prince William County, Virginia, but the outbreak of the Civil War rendered this venture unsuccessful.

Newton was personally acquainted with Lincoln. One story has it that he delivered milk to the White House. Lincoln placed him successively in charge of agricultural work in the Patent Office and in the Department of Agriculture.

Early in 1863 Newton reported for the first time to President Lincoln. He began by quoting and discussing the organic act of his Department. He also reported that between July 1, 1862 and January 1, 1863 he had expended the sum of \$34,342.27, leaving an unexpended balance of his appropriation of \$25,657.73. He asked Congress to grant him \$130,000 for the fiscal year to end June 30, 1864, "which is deemed a low estimate."

Objectives of Department Take Shape

The earliest bound volume of Department of Agriculture publications now in the Department Library begins with a circular from the Commissioner himself on the "Present Agricultural, Mineral, and Manufacturing Condition and Resources of the United States," dated 1862. Next there is a "Catalogue of the Plants, Bulbs, Tubers, for Distribution from the U. S. Propagating Garden," with a report on the "Objects and Aims of the Garden" by its superintendent, William Saunders, dated the same year. Then follows the "Report on the Chemical Analysis of Grapes," by Chemist Charles M. Wetherill, who concluded that our wine grapes were as good as those of Europe. The Commissioner's report for 1863 contained meteorological data supplied by Joseph Henry of the Smithsonian Institution.

Newton mentioned buildings, but not until 1867 did Congress appropriate \$100,000 for building at 12th and B. Streets, Southwest. A stable was erected in 1879, and \$25,000 was appropriated to put up a building for the Seeds Division and the Division of Statistics in 1881. A green-house was erected in 1883,— no more new buildings until 1897.

The Commissioner recommended the founding of a library. One had been

started in the Patent Office in 1840 when a clerk was appointed to gather statistics and useful agricultural material. In 1869 the Department got these books and added them to its own inadequate library. This occupied the entire west end of the first floor of the new Department building. J. B. Russell, the first librarian, was appointed in 1871.

Jacob R. Dodge, who was appointed statistician in 1866, was distinguished in his specialty, and served the Department well for 24 years. Statistics were long regarded as almost a divine revelation and as constituting the physics and physiology of society. Investors and speculators spent huge sums to obtain figures from which to predict market fluctuations. They thought that reliable crop information would set the farmer right up in the world; and that he could foil speculators by withholding his crops from market till the right time. It was a beautiful theory but did not work, partly because too few farmers fully understood the implications of the statistics provided for them.

During the war there had been an era of prosperity in some areas. The Corn Belt had begun to be stabilized in the present area. Wisconsin and Illinois were still the chief wheat-producing States, but the Wheat Belt began to move generally across the Mississippi. The Cotton Belt had also begun to move westward, away from the exhausted lands of the Southeast.

On November 27, 1865 Commissioner Newton reported to President Johnson for 1865. It was a time for world expansion. Some departmental scientists had been sent to Europe and Asia to make observations, and they traveled very economically. In fact ^{Townsend} / Glover had attended the entomological exhibit in Paris at a cost of only \$500.

Chief Clerk John W. Stokes was Acting Commissioner from June 20, 1866 until December 4, 1867 when Horace Capron (1804-85) was appointed Commissioner. Capron was born in Massachusetts, but grew up in New York. In 1836 he erected a cotton mill at Laurel, Maryland, which he later made into a model factory. Upon his resignation as Commissioner June 27, 1871 he went abroad to become agricultural

adviser to the Japanese Government.

Commissioner Capron manifested considerable interest in steam plowing and reported 3,000 steam plows at work in England and only 2 in the United States. Later in the book appeared a 10-page article on the "History of American Inventions for Cultivation by Steam." It was written by a patent examiner and well illustrated. The new Commissioner said he had reorganized the Department, making drastic changes. At this time, January 13, 1868, the Department had about 47 employees.

In 1868 Commissioner Capron could report to President Johnson that the new building was at last completed. It was of Renaissance architecture, 3 stories high, and 170 by 61 feet. Its steam-heating apparatus was reported to be in successful operation. Including furniture and laboratory equipment it had cost \$140,420. Reporting to President Grant for 1870 Commissioner Capron again protested the insufficient remuneration of his staff and asked much larger appropriations. He reported expenditures of \$169,175.24.

President Grant appointed Frederick Watts (1801-89) to succeed General Capron, and he took office August 1, 1871. Watts was born in Pennsylvania of Welsh extraction. He grew up on a farm and acquired a taste for and interest in farming. He studied law and was president of the Cumberland Valley Railroad Company from 1845 to 1871, but he had meanwhile engaged in scientific farming. Watts had experimented with various types of farm buildings and had organized farm societies. He was the first head of the Department to give attention to our timber supply. His reports are dated from 1871 to 1876.

Watts appointed the statistician, J. R. Dodge, to serve also as editor and the latter complained that it was very difficult to get properly qualified persons to compile and edit agricultural reports. The compensation, \$1,200 to \$1,800 a year, was insufficient to attract workers with broad agricultural experience and high literary attainments.

In 1872 the Department had an appropriation of \$197,070 of which all but

\$1,278.82 was expended, but that was said to be sufficient to cover outstanding bills and still leave a small margin for return to the Treasury. In 1873 the Commissioner spoke of the increasing importance of entomology, and noted the cost and extent of insect damage.

Chemist William McMurtrie, was devoting his time to agricultural products. Watts had been annoyed by private individuals who wanted the departmental chemist to test wine, patent medicines, and mine samples for them, and even to give them certificates of merit. Since there had been loud complaints about frauds in commercial fertilizers the chemist was told to analyze some of them and publish the results.

In 1872 when James M. Swank wrote his brief account of the Department's history and development, J. R. Dodge was statistician, William Saunders the superintendent of gardens, Townsend Glover entomologist, Ryland T. Brown chemist, George Vasey botanist, J. R. Russell librarian, and Andrew Glass superintendent of the seed room. The Department had 50 clerks and specialists and 50 messengers, laborers, and other employees.

President Hayes appointed William G. LeDuc (1823-1917) Commissioner of Agriculture on July 1, 1877. The latter was born in Ohio, the son of a French father who had come to the United States to help the colonists in the Revolutionary War. LeDuc had studied law, been admitted to the bar, and had become active in and around St. Paul in the development of the farm country. He served in the Union army and later entered railroading. As Commissioner he established a tea farm and was greatly interested in sugar beets, sorghum, and animal diseases, the last interest culminating in the Bureau of Animal Industry.

Commissioner LeDuc's first Annual Report was for 1877. In it he presented a table to show that the Department of Agriculture received small appropriations as compared with other Federal Government agencies.

In 1879 a Veterinary Division was established to carry out fully the work on animal diseases. Congress had also appropriated \$10,000 for study of the history

and habits of insects. Veterinarians contributed long articles on animal diseases in this 1879 volume. The last report submitted by LeDuc was that for 1880.

LeDuc also wrote that the departmental employees received lower pay than those doing similar work in other Departments. His distinguished chemist received only \$2,000 a year (when he got it) for his "laborious and valuable" services, whereas a chemist who worked a short while detecting fraud in sugar for the Treasury Department received four times that much.

Dr. George B. Loring (1817-91,) of Massachusetts, educated as a physician, but also a scientific farmer and a Victorian-type political orator, was appointed Commissioner of Agriculture by President Garfield, July 1, 1881. Loring had operated a stock farm and had done much to further agriculture throughout his life.

Loring's first volume bears the dates 1881 and 1882. D. E. Salmon, later to be first chief of the Bureau of Animal Industry, and already a distinguished scientist, was in charge of the Veterinary Division. Reports were printed by several veterinarians regarding contagious pleuropneumonia, and agitation was rife for Federal action.

Organization and Growth in 1883 and After

In 1883 the Department consisted of the Division of Gardens and Grounds; the Botanical Division; the Microscopic Division; the Chemical Division; the Entomological Division; the Division of Statistics; the Veterinary Division; the Forestry Division; and the Seed Division.

Not many years later Theobald Smith, F. L. Kilborne, and Cooper Curtice solved the cattle-tick fever puzzle in the Bureau of Animal Industry by proving that the tick was the transmitting agent. This was a fundamental medical discovery of far-reaching importance.

The first report of the Bureau of Animal Industry was in the main devoted to

contagious pleuropneumonia and cattle-tick or southern cattle fever. The bill creating the Bureau was introduced by William H. Hatch of Missouri. Its passage marked a notable extension in the interpretation of the general-welfare clause of the Constitution. Here was a problem that actually transcended the capacities of the States, and individual freedom had to be restricted by the Federal Government for the public welfare.

The Bureau stamped out contagious pleuropneumonia in 5 years, a world record for its control and a tremendous boon for livestock men. The Bureau thereafter performed a long line of outstanding scientific research on hog cholera, hookworm, bovine tuberculosis, anthrax, blackleg, cattle-tick fever, contagious abortion, and many other animal and fowl diseases.

We come now to the last Commissioner of Agriculture who was also the first Secretary of Agriculture, Norman J. Colman (1827-1911) of Missouri. He was appointed by President Cleveland to take office April 3, 1885, and his first Report is dated that year. Colman was born in New York; taught school, studied law, and fought in the Civil War. After the war he started "Colman's Rural World" in St. Louis. He was elected to the Missouri State legislature and manifested much interest in the State university and served in many agricultural organizations

Colman was appointed because of his broad knowledge of agricultural problems and was almost certainly the most competent head the Department had up to that time. He was largely instrumental in effecting the passage of the Hatch Act which founded the State agricultural experiment stations and gave the Department its second Bureau, the Office of Experiment Stations.

Largely through Colman's interest a meeting was held in 1883 to consider the establishment of State experiment stations with Federal aid and a permanent organization was effected at the third meeting in 1887 - the Association of American Agricultural Colleges and Experiment Stations. The agricultural societies, especially the Grange and similar agencies, clamored for action. On March 2, 1887 the Hatch Bill was passed establishing the first national system of agricultural

experiment stations in the world and setting up the Office of Experiment Stations in the Department of Agriculture to coordinate their efforts. This authorization of combined Federal and State work naturally required some departmental reorganization.

W. O. Atwater was made Chief of the Office of Experiment Stations and A. C. True was associated with him.

The Department had received scant praise in its career so far. The farmers could not well apply the knowledge they had received in the form in which they received it. That was a gap which the Extension Service filled a decade or so later. Congress must give the Department scope for educational, economic, and social as well as scientific functions.

Emphatic Agitation for Cabinet Rank

The 50th Congress (December 5, 1887 - March 3, 1889) was simply deluged with petitions and memorials asking that the Department be given Cabinet rank. This was not altogether new agitation; it had gone on periodically for 30 years. Bills had even been introduced and occasionally passed by the House of Representatives to give The Department cabinet rank. Finally the Hatch Bill was passed and signed. Commissioner Colman was nominated and on February 13 confirmed as the first Secretary of Agriculture. The sources of lawmaking are ^{very} clear in this instance. Congress created the Department of Agriculture because of the hard effort, ceaseless agitation, and widespread expression of views by those who favored such legislation.

Colman left office with Cleveland. The incoming President Harrison appointed Jeremiah M. Rusk (1830-93,) and he assumed office on March 7, 1889. Rusk had been born on a farm in Ohio, but in 1853 he went to Wisconsin to keep a tavern. This venture was a success so he started a stage line which was also profitable, and in time he became Governor of Wisconsin. His period as Secretary of Agriculture was

marked by the eradication of destructive cattle diseases, and the passage of legislation for the inspection of meat. Rusk's particular contribution was his recognition of the importance of publicity and his ability to engage the interest of the press in departmental activities.

Secretary Rusk promptly reorganized the Department. He retained direction of the executive work himself and placed the scientific work under the first Assistant Secretary provided by Congress, who was Edwin Willets. He set up a Division of Records and Editing and urged the frequent publication of the results of scientific work in clear language that practical farmers could readily understand. The publication of Farmers' Bulletins therefore began. Rusk also began a systematic investigation of foreign markets for American farm products. He indicated that our farm exports were not so profitable as they once were.

The Department of Agriculture consisted of the following branches in 1889: Division of Statistics; Division of Entomology; Division of Chemistry; Section of Silk Culture; Botanical Division; Section of Vegetable Pathology; Division of Economic Ornithology and Mammalogy; Division of Microscopy; Office of Experiment Stations; Forestry Division; Division of Gardens, Grounds, and Horticulture; Seed Division; Division of Pomology; Folding Room Library; Museum; Bureau of Animal Industry.

In 1891 the Weather Bureau became the Department's third unit of bureau status. It had been transferred from the War Department, because the public considered that civilian control would make it more useful to agriculture and commerce. Since the Department had long carried on meteorological work the transfer was appropriate.

Cleveland, returning to the Presidency, appointed J. Sterling Morton (1832-1902) Secretary of Agriculture. He assumed his post March 7, 1893. He was born in New York and enjoyed the "distinction" of having been expelled from the University of Michigan for his independence. He had located in Nebraska City where he became a politician and editor of a newspaper. Morton had long been a student of agriculture, and had owned and worked a Nebraska quarter-section. He had a passion for

tree planting and became the founder of Arbor Day. As Secretary he emphasized economy and so objected to free seed distribution that he actually put a stop to it at one time.

Reporting for 1893, the secretary advocated better departmental organization and gave some information about foreign agricultural departments. He said that the classified civil service was defective because there was too much injustice in rank and pay. Secretary Morton commented that the act creating the Department had provided it with no building. The main structure erected in 1867 to accommodate 50 people in 4 divisions was now far too small.

The formation of the Dairy Division and its initial operation were described in Morton's 1895 Report. Henry E. Alvord was its first chief. Civil Service status had been extended to the Department's 2,019 employees by Presidential order dated May 24, 1895, which included all of them except the Presidential employees and common laborers. The Department now had 429 female employees.

In his final statement, that for 1896, Morton recorded that the Department's annual appropriation was \$2,583,750.

The Secretary consistently operated the Department economically and turned money back to the Treasury. He was very hostile to seed distribution and insisted it be abolished, and had actually tried to stop seed distribution by injunction. Seeds to the amount of two million dollars in retail value had been sent out in competition with those sold by retail seedsmen. Later the seedsmen were given the business of making the distribution themselves which mollified them.

The Secretary gave the average age of the chief of his scientific bureaus as 42 years and 3 months, the oldest being 51 and the youngest 29. He said that their salaries of \$2,500 and the \$1,800 paid their first assistants were insufficient. Even the directors of the State experiment stations received more. Turn-over was high because the scientific staff was underpaid.

At this point Secretary Morton left office and James Wilson of Iowa was appointed his successor by President McKinley, taking office March 7, 1897.

Secretary Wilson (1836-1920) was born in Ayrshire, Scotland; he came to the United States in 1851 and chose farming as his life work. He early became a community leader in Tama County, Iowa, was elected to the legislature, and also served three terms in Congress. In 1891 he was made professor of agriculture and head of the experiment station in Iowa State College. Henry Wallace, father of Henry C. and grandfather of Henry A., suggested his name to President McKinley for Secretary of Agriculture. Wilson continued in office for 16 years, remaining under Presidents Theodore Roosevelt and William H. Taft.

Turn of Century Sees Great Advancement

Farm demonstration and cooperative extension work were undertaken during Secretary Wilson's term and a small army of experts and scientists was employed. The Department grew into a magnificent research regulatory, educational and custodial institution, each manifestation of growth representing an effort to provide the services demanded by the public and authorized by Congress. Not only did research in the natural sciences attain very high quality under Secretary Wilson, but social and economic studies advanced rapidly.

While James Wilson held office urban influences on rural life rapidly intensified. Means of transportation and communication vastly improved. The increasing manufacture of automobiles and the improvement of roads gave farmers new access to markets. Competition grew keener and farm credit became an acute problem. The numbers of people engaged in farming grew steadily less. In 1910, only 32.2 percent of all persons gainfully employed were in agriculture, and the estimated average equity of farm operators in the land they tilled was 50 percent.

In his report for 1899 Wilson started the custom of beginning with brief items summarizing the year's outstanding accomplishments. Atwater now had a flow of nutrition bulletins appearing, and Wiley reported on food preservatives. N. E.

Hansen, M. A. Carleton, Water T. Swingle, and David Fairchild were mentioned as plant explorers.

At the turn of the century in 1900 Secretary Wilson expressed his determination of bringing scientists to the aid of farm producers, and to this end 21,000, 000 copies of departmental publications had been distributed.

In 1901 the Secretary effected the long-needed reorganization of related departmental units into bureaus. The Bureaus of Plant Industry, Chemistry, Forestry, and Soils were created with chiefs at \$5,000 each. B. T. Galloway became the first head of the Bureau of Plant Industry and Harvey W. Wiley headed the Bureau of Chemistry. Milton Whitney became chief of the Bureau of Soils which took over all work on soil curves, soil analysis, soil technology, and drainage investigations. Gifford Pinchot was made Forester.

Farm Demonstration Experiments Begin

In the report for 1902 we find first mention of the farm-demonstration experiments undertaken to show the value of using scientific cultivation methods on selected "demonstration" farms in various communities. This novel and important idea originated with Seaman A. Knapp of the Bureau of Plant Industry. Ultimately the Extension Service was organized to carry adult education in agriculture right to farmers on their own farms. At that time, though, agricultural editors and farmers' institutes were pioneering in this work that later became an organized governmental activity.

The appearance of the cotton boll weevil speeded Dr. Knapp's farm-demonstration work, as the weevil produced a crisis in cotton production. Texas especially appealed loudly for Federal aid. At one huge mass meeting in Dallas half a million dollars was demanded to fight the weevil. The farm-demonstration method proved an

ideal means of instruction. Dr. Knapp also won praise for the 250,000 acres of rice growing in Texas from varieties he had introduced.

In 1904 Secretary Wilson made reference to farmers as our greatest source of natural wealth and said that well-being was generally diffused among them. The Bureau of Entomology with L. O. Howard at its head had been established in accord with recommendations made the year before. It was aiding the rapid spread of farm-demonstration work to cope with the boll weevil. The Weather Bureau announced that it would interpret "the language of the sun" at Mt. Weather.

On February 1, 1905 custody of the national forests was transferred to the Department and fused with its Bureau of Forestry to form the Forest Service. The Bureau of Chemistry reported that it had lost many employees due to the low salaries paid. It was studying food poisons and standards and cooperating with the Postoffice Department in protecting the mails from makers of fake remedies. The Bureau of Statistics had considerably improved its crop reporting, and the Office of Road Inquiry became the Office of Public Roads.

In 1906 the Department reported an annual appropriation of \$7,175,690. There were 1,594 employees in Washington and 4,648 in the field. The new East and West Wings of the present Administration Building were nearly complete but by no means large enough.

Dr. Wiley had helped in effecting the passage of his Food and Drug Law on June 30, 1906 and the Bureau of Chemistry was charged with its enforcement. A force of chemists and inspectors had to be appointed, and before long the number of employees in the Bureau of Chemistry was doubled.

Agricultural science had enormously increased production, but this increase was accompanied by a reduction in farm exports and a diminishing rate of population growth. However, farmers could always provide sufficient food for our population, so the Secretary seemed satisfied with conditions. He praised farmer cooperatives as well as the rapid extension of the Farmers Cooperative Demonstration Work.

Country Life Commission a Landmark

President Theodore Roosevelt appointed his Country Life Commission in 1908. The Commission held 30 hearing throughout the nation. In various ways it sought aid from over 100,000 persons. Dr. L. H. Bailey of New York was its chairman. The other members were Henry Wallace of Iowa; Walter Hines Page, who later became war-time ambassador to Great Britain; Gifford Pinchot, the great Forester and later Governor of Pennsylvania; and Dr. Kenyon L. Butterfield of Massachusetts Agricultural College.

The Commission held that a new race of teachers should appear in the country and that a new rural clergy be trained. It suggested increased farmer cooperation, the promotion of rural social advantages, and the expanding of efforts to make country life more "gainful" and more rewarding. It recommended that inventory be taken of our rural resources from the soil up, that a united campaign be instituted for rural progress, and that the extension work be organized on a national basis through the State colleges of agriculture.

It was in 1908 as well that serious study of farm economics was undertaken in the Bureau of Plant Industry with W. A. Peek in charge. The subjects of investigation were farm accounts, farm records, and the economic value of using farm equipment.

By this time the Department was enforcing food, game, drug, bird, livestock, quarantine, and meat-inspection laws, and many others besides. Its work had to expand constantly, as Congress passed new laws and charged the Department with their enforcement.

Farm cooperative demonstration work was widespread now seven years after its inception, and farm children also were being organized in clubs. Farm economic studies continued in the Bureau of Plant Industry where "farm problem or extension work" began. Trained men were being sent out as teachers. W. J. Spillman

spread this farm demonstration work to the North and West; in 1911 he helped establish the first Farm Bureau. Bradford Knapp, son of Seaman A., carried on the farm cooperative demonstration work in the South.

Dynamic Era in The Department

It may truthfully be said that when Secretary Wilson left office with President Taft, a definite era in the history of the Department of Agriculture ended. The incoming President Woodrow Wilson appointed the historian, economist, financier, and former college president, David F. Houston, Secretary of Agriculture. The appointment was an appropriate one at this juncture of the Nation's agricultural affairs. Secretary Houston had received a master's degree in government at Harvard. He taught at the University of Texas after which he became president of the land-grant college of that State.

In general it may be said that Secretary Houston ushered in a period when the Department devoted much more attention than before to broad social and economic issues affecting farmers. As he said in his report for 1913: "We have unmistakably reached the period where we must think and plan." Nevertheless study of the evolution of agricultural policies indicates marked continuity throughout. When changes occur the new will be found to have its roots fixed firmly in the old—in some research or fact finding investigation that went on much earlier.

Houston realized that farm-management studies could no longer be carried on effectively in the frame of reference of the Bureau of Plant Industry. He recognized the great importance of the extension work and understood that it should function more independently. He asked and acted upon the advice of such men as Thomas N. Carver of Harvard, George F. Warren of Cornell, Andrew Boss of Minnesota, H. C. Taylor of Wisconsin, James A. Foord of Massachusetts Agricultural College, John I. Falconer of Ohio State, and Richard L. Adams of the University of Cali-

formia. He inaugurated the "New Freedom" period which actually extended to the death of Henry C. Wallace.

Finally Secretary Houston saw the necessity for greater centralization within the Department and set up a number of staff agencies to effect integration. Originally the Department consisted largely of independent research sections and divisions which generally pursued thier own ways.

In response to long-continued agitation and in recognitions of the new emphasis on distribution in agriculture, Congress had provided for specifically, in its appropriation for 1913-14, the acquiring and diffusing among the people, useful information on subjects connected with the marketing and distribution of farm products, and made \$10,000 immediately available. To carry out the intention of Congress Secretary Houston established the Office of Markets, attached directly to his office. Under the leadership of Charles J. Brand it rapidly became one of the spearheads in the vigorous attack on economic and social problems.

In 1914 the Office of Markets was assuming much enhanced importance. The Cotton Futures Act has been passed. Studies of rural credit were under way and better dissemination of information has been effected. The Smith-Lever Agricultural Extension Act was passed on May 8, 1914, and the Extension Service was being organized to carry out its provisions. It provided for the use of personal-contact teaching methods to be financed by the grants-in-aid. Formal agreements between the Department and the land-grant colleges had to be effected. The Office of Information was created.

By 1916 work on marketing, finance, and rural organization mapped in earlier reports, was well under way. Acts establishing standards for staple agricultural products shipped to market, as well as the grain futures, grain standards, warehousing, and Federal farm-loan and Federal-aid road laws had all been passed. The loan act was especially designed to create a banking system tailored to rural needs.

World War Brings Drastic Changes

By 1917 Houston was stressing all efforts to increase farm production for domestic use and export. The Food Administration was started with Herbert Hoover in charge. The cooperative Extension Service sprang into new usefulness in showing farmers how to increase food production to win the war. An additional appropriation of over 4 million dollars was made to expand this work. Farmers responded vigorously, struck the plow into land hitherto untilled, and won praise for it. Home economics work, Federal and State, increased in importance under impact of war conditions.

A record acreage had been planted by 1918 and crop yields had been stimulated in all practicable ways. Every agency was pushing this work. Authority was now granted to use motion pictures for purposes of agricultural education. Interest in farm land increased, land speculation got under way, and farm values shot up miraculously, tempting farmers to top-heavy mortgage indebtedness.

The day following Secretary Houston's resignation to become Secretary of the Treasury, February 2, 1920, Edwin T. Meredith, an Iowa Farm Editor, became Secretary of Agriculture. The latter served until March 4, 1921 and made the report for 1920, in which the farmers were still being praised for glorious wartime service. But Secretary Meredith advised farmers that they now faced a declining market, with shrinkage of land and other values, and the Secretary admitted that there was no simple solution for this complex problem. World conditions were chaotic.

In 1922 President Harding called an agricultural conference in Washington; the Grain Futures Act was also passed this year. The surplus became the chief agricultural problem; it was at first attacked as a marketing, and later as a marketing and production problem.

On March 5, 1921 President Harding appointed Henry C. Wallace, father of Henry A. Wallace, to be Secretary of Agriculture. In his first report, for 1921, Wallace

frankly recognized the dangerous nature of the farmer's position with overexpanded acreage, inflated land values and an uncertain foreign market confronting him, and an industrial depression under way. The farmer was said to produce on faith and take great risks, and his 1920 crops were produced at the greatest cost known.

Marketing was now seen to be an integral part of production, though scientific research was still regarded as basic, and a Director of Scientific Work was appointed. Henry C. Taylor became chief of the new Bureau of Agricultural Economics on July 1, 1922. Work in home economics was also still increasing in importance. Wallace warned that no new land should be opened to cultivation and recommended intensive, cost-lowering methods to farmers.

Secretary Wallace died in office October 25, 1924, and Assistant Secretary Howard M. Gore immediately became Acting Secretary. He was appointed Secretary of Agriculture November 22, 1924, and served until March 4, 1925 when he resigned to become Governor of West Virginia. The 1924 volume was prepared under the direction of Secretary Wallace; Gore transmitted it as Acting Secretary.

The Bureau of Dairying was established by act of Congress of May 29, 1924. The dairy industry had asked for the establishment of a bureau to consolidate work in this field.

It almost seemed as if the departmental research workers had overreached themselves. Set to lowering the unit costs of agricultural production and to improving yields, they had succeeded so admirably as to aid in producing enormous surpluses.

Only 21.5 percent of all our people gainfully employed were engaged in agriculture in 1930 and the estimated average equity of farm operators in the land they farmed was only 41 percent. The latter figure dropped to 39 percent 5 years later. The agricultural export market suffered increasingly serious competition; the day of loans to Europe had passed, and our own tariff walls not only effectively shut out foreign goods but stimulated similar action on the part of other nations. The

highly protective Hawley-Smoot Tariff Act was passed in 1930.

Industrial Prosperity Masks Real Conditions

On March 5, 1925, William M. Jardine, President of the Kansas State College of Agriculture, took office as Secretary of Agriculture and served until March 4, 1929. During his term ominous conditions in agriculture were somewhat masked by the spurious and highly specialized industrial and financial "prosperity."

Agricultural exports were said to have increased. The farm-credit situation was regarded as bad, the small farmer suffered, and local agricultural credit organizations were suggested as a remedy. In some regions it was held there was actually lack of confidence in future expansion.

Agricultural pressure groups also recommended the passage of laws to authorize the setting up of agricultural credit corporations and for expanding livestock grazing rights in national forests. Investigations were already under way on high freight rates and farm taxes, and it was insisted that the tax load must be in part removed from farm property. The Department also saw that it must aid in the business organization, management, and operation of farm cooperatives, as well as the education of farmers in regard to them.

In 1927 the farm problem was still acute. The Secretary suggested that wastes be cut, production costs diminished, the margin between producer's cost and consumer's purchasing price lessened, the costs of transportation and distribution reduced, the tax burden redistributed to help reduce the farmer's overhead, and that farmers cooperate to enhance their bargaining power. What should be done was clearly seen; how to do it remained puzzling.

Cooperative marketing had made progress, but united farmer action would be required to adjust production to demand. The problem of land utilization had assumed importance. This was directly counter to the traditional trend of individual

exploitation of land resources. We had more acres in cultivation now than we needed.

The cumulative pressure of agricultural problems increased continually. In 1929 general panic and depression burst on the country. Arthur M. Hyde, a former Governor of Missouri, became Secretary of Agriculture March 5, 1929 to serve until March 4, 1933. His first report reviewed the agricultural industry as a whole and the several crops specifically.

Meanwhile the Federal Farm Board had been organized. An adjunct of the Department, the Board had authority to create commodity stabilization corporations and to recognize and collaborate with farmer cooperatives. It could make loans from a half-billion-dollar revolving fund, but it had no control over production or acreage.

"The 1930 Drought" was the first subhead in Secretary Hyde's report for that year. The effects were so extended that relief would be required. The Red Cross had given aid, and Congress made emergency loans of 6 million dollars available both in 1929 and in 1930, although \$4,580,683 of the first 6 million dollars had already been repaid.

The Secretary contended once again that the tariff act of 1929 aided farmers by protecting their domestic market. On June 5, 1930 Congress provided for an expansion of the foreign agricultural service. The Bureau of Dairying was now the Bureau of Dairy Industry. The Grain Futures Administration made a separate report again. M. S. Eisenhower signed a report as Director of the Office of Information.

In the 1931 volume world influences were accused of depressing American agriculture which lacked a foreign market and was therefore surplus-burdened. Agriculture would positively benefit from the high tariff just as soon as we learned to quit producing for an export market that no longer existed.

The Department's basic task was still held to be scientific research, the results of which were not intended so much to stimulate production as to help balance supply and demand, guarantee the dependability of production, raise living

standards, and aid industry as a whole. This research also helped find new uses for agricultural commodities, thus founding new industries and spreading employment. It also improved the quality of commodities.

The Department had been a pioneer in developing wise land use policies; it had formulated the entire theory. A National Land Use Conference had been held in Chicago at its suggestion where all relevant ideas were discussed and programs were mapped out. The farm plant was still too large and land submarginal for agriculture simply contributed to tax delinquency, hence it must be kept out of cultivation. Soil erosion also must be stopped. Secretary Hyde said that the recommendations made by the conference on land use would be carried out.

Another Dynamic Period

On March 3, 1933 Henry A. Wallace, an Iowa farm editor and son of Henry C. Wallace, became Secretary of Agriculture and ushered in another dynamic period in its history. All that was done in this period of action, however, had roots in the research, the discussion, and the social and economic thinking carried on in the Department during the previous more static decade.

Congress accordingly passed the Agricultural Adjustment Act, approved May 12, 1933. Here again, it should be noted, there was no sharp break with the past. The ideas in that act had been mulled over frequently within as well as outside the Department. W. J. Spillman had some of the notions in his "Balancing the Farm Output" published in 1927, and M. L. Wilson, also previously an employee of the Department, was in part responsible for drafting the act. Howard R. Tolley and Charles J. Brand, also associated with the legislation, were not new to the Department.

Named as co-administrator of the Agricultural Adjustment Act with Mr. Brand, George N. Peek of Moline, Ill. had been another advocate of new methods of coping

with the farm surplus problem. These men, together with a Department economist, Mordecai Ezekiel, had much to do with pioneering the new era of adjustment and departure from precedent.

The Adjustment Act, as Secretary Wallace analyzed it in his first report, sought to raise the income of farmers in two ways. (1) Production was to be adjusted to demand. (2) The Secretary of Agriculture was to enter into marketing agreements with producers, processors, and distributors of agricultural products, in order to eliminate competitive wastes, improve trade practices, move surpluses into the market, and raise producers' prices.

The Agricultural Adjustment Act, generally referred to as the A.A.A. necessarily provoked thoughtful criticism as well as approval. In his report for 1935, Secretary Wallace considered a number of the issues that had been raised. He denied that the measure sought to create artificial scarcity. Given a rising demand for a particular commodity, production would be increased accordingly. The long-term objective of the program was to prevent recurring cycles of over and underproduction.

The Secretary reported that the stock of surpluses had been sharply reduced. This was due partly to the production curtailments of the national farm program. Another very important factor was the drought of 1934, which was the worst ever recorded in the United States. It extended over 75 percent of the country, severely affecting 27 States.

It was announced that several important changes had been made in the organization of the Department. The position of Under Secretary of Agriculture had been created and Rexford G. Tugwell appointed to fill the post. There was no longer to be a Director of Scientific Work, and an Office of Budget and Finance had been created.

In January 1936 the Supreme Court in the Hoosac Mills case invalidated the compulsory features of the Agricultural Adjustment Act. Congress thereupon passed the Soil Conservation and Domestic Allotment Act. The Annual Report for 1937 contains

a detailed description of this measure and the steps taken by the Department to enforce it. The discussion is prefaced by a noteworthy analysis of our national agricultural policy.

An altered economic world called for a new agricultural policy. But the link between the old and the new was direct and close. The old exploitation forced the new conservation. The Federal Farm Board, the McNary-Haugen plan, the A.A.A. programs, and the Soil Conservation and Domestic Allotment Act had one basic characteristic in common. They all recognized that modern problems cannot be solved by ancient formulas, and that agricultural policy today is necessarily in large measure the opposite of what it was in the period of the open frontier.

Secretary Wallace's final report cited the unpromising export outlook and the ominous rise of economic nationalism. It detailed the wide variety of defense functions the Department was performing and could perform. On September 4, 1940, Secretary Wallace resigned his post to become a candidate for the Vice Presidency. Under-Secretary Claude R. Wickard of Indiana became the next head of the Department.

It was the Agricultural Adjustment Act of May 12, 1933, which ushered in much new legislation that resulted in the setting up of the so-called "action agencies" of the Department. This act was designed to establish and maintain such balance between the production and consumption of agricultural commodities, and such marketing conditions therefor, as would reestablish prices to farmers at a level that would give farm products the purchasing power they had in specified earlier base periods. The base period for most commodities was 1909 to 1914.

Some of the legislative acts authorizing other parts of this action program were as follows: The Emergency Farm Mortgage Act of 1933; the Farm Credit Act of 1933; the Federal Farm Mortgage Corporation Act and the Jones-Costigan Sugar Act of 1934; the Soil Erosion Act of 1935; the Soil Conservation and Domestic Allotment Act, the Rural Electrification Act, and the Flood Control Act of 1936; the Agricultural Marketing Agreement legislation, the act placing the functions of the Federal Surplus Commodities Corporation in the Department, the Bankhead-Jones Farm Tenant

Act, the Norris-Doxey farm forestry legislation, the Pope-Jones water-facilities legislation, and the Sugar Act, all of 1937; and the Flood-Control Act, the Agricultural Adjustment Act, and the Federal Crop Insurance Act of 1938.

Some of these agencies were created as independent establishments and later came to the Department where some of them have since undergone changes in name and structure. The Farm Credit Administration was created in 1933, but became part of the Department only on July 1, 1939. The Rural Electrification Administration was set up as an independent agency on May 11, 1935, and came to the Department July 1, 1939. The Commodity Credit Corporation was established October 17, 1933, and was placed in the Department July 1, 1939.

Second World War

Secretary Wickard was an Indiana dirt farmer. He graduated from Purdue with a degree in animal husbandry and, even before that, began helping to operate the family farm settled by his great-grandfather in 1840. He continued to manage the farm after he came to Washington in 1933. Before that he had been a member of the Indiana State Legislature. He was a member of the National Corn-Hog Committee of Twenty-Five which helped establish the original corn-hog program of the Agricultural Adjustment Administration.

In 1935, Mr. Wickard became chief of the Agricultural Adjustment Administration corn-hog work, thus being the third future Secretary to work in the Department in a subordinate capacity before assuming that office. When the Agricultural Adjustment Administration's agricultural conservation program started in 1936, Mr. Wickard became assistant director of the North Central Division. He was appointed Under Secretary of Agriculture on February 1, 1940.

On March 29, 1943, Chester C. Davis became the first War Food Administrator,

serving until he resigned June 28, 1943; he was succeeded by Judge Marvin Jones, who served until the War Food Administration was recombined with the Department of Agriculture by Executive Order effective July 1, 1945. Mr. Wickard became head of the Rural Electrification Administration at this time.

An Office of Agricultural Defense (later War) Relations was set up in the Department on May 5, 1941, in response to a letter from the President. On July 5, Secretary's Memorandum No. 921, established State and county defense boards. On December 13, 1941, there was announced a major reorganization of the Department to streamline it for the war effort. This was validated by an Executive Order dated February 23, 1942. At this time three large administrations were established as follows: The Agricultural Conservation and Adjustment Administration was created by merging activities of the Agricultural Adjustment Administration (later Agricultural Adjustment Agency,) the Soil Conservation Service, the Federal Crop Insurance Corporation, and the Sugar Division.

The Agricultural Marketing Administration was created by merging the activities of the Surplus Marketing Administration, the Commodity Exchange Administration, the Agricultural Marketing Service, and the Consumers' Counsel Division of the Agricultural Adjustment Administration.

The Agricultural Research Administration was created by grouping the activities of seven old-line scientific bureaus and agencies concerned with research and regulatory work, four Regional Research Laboratories, and nine Bankhead-Jones Laboratories. The Agricultural Research Center at Beltsville, Md., was also placed under the supervision of the Administrator.

On June 9, 1942, the White House announced the appointment of a Combined Food Board, composed of the Secretary of Agriculture and the head of the British Food Mission. It was to effect planned and expeditious utilization of the food resources of the United Nations.

Streamling For War

Fundamental reorganization of the Department again took place as a result of the Executive Order, dated December 5. At that time the Food Production Administration and the Food Distribution Administration were established. These, with the Agricultural Research Administration, the Commodity Credit Corporation, the Forest Service, the Rural Electrification Administration, and the staff agencies, then constituted the Department.

Naturally the Secretary's wartime powers invested the Department with much more authority and importance than it had ever possessed hitherto. It began to touch the lives of every citizen and to assume a defense and later wartime role of the most critical character. Mr. Wickard's first annual report, submitted on November 1, 1941, was prefaced by a "postscript" announcing the Japanese attack on Pearl Harbor and our precipitation into World War II.

Gradually we began to produce what was needed for defense and war purposes, when needed, and in the quantity required. Farmers rose to new heights of efficiency each production year, the Department acting as over-all staff counselor and adviser. The Department became active in the fields of labor supply, plant site location, and transportation problems, and rendered assistance to farmers in procuring supplies and equipment, priorities and allocations.

A special far-reaching nutrition program was undertaken in foreknowledge that all our people must be reasonably well fed to meet the forthcoming emergency, and that we must also produce much food for our potential and probable allies. The war-time job of the Agricultural Adjustment Administration became greater than ever before. The year's production was outstandingly favorable and we entered the war far better fortified than we would have been had no national farm program existed.

Through the State and County War Boards the Department gave farmers technical aid, made arrangements about price supports and money payments, and generally

assisted them to fulfill their goal pledges. Every agency in the Department did its utmost to assist the Food for Freedom Program. Food conservation was stressed and scarce farm foods began to be allocated to specific needs. A research food-dehydration project soon showed the way to save cargo space and get more actual food value abroad more rapidly than ever.

WAR FOOD ADMINISTRATION

For war purposes the program agencies of the Department of Agriculture were grouped into two administrative units, each headed by an official appointed by and directly responsible to the President. The agencies in the War Food Administration were responsible to the War Food Administrator. The Agricultural Research Administration, Farm Credit Administration, Rural Electrification Administration, and Forest Service were responsible to the Secretary of Agriculture.

On April 30, 1943, the War Food Administration announced an organization to administer the farm labor program. The Director of the Extension Service became responsible for mobilizing farm labor for use within each State, and for the placing of all workers needed on farms to meet local labor needs.

An Office of Materials and Facilities, to aid farmers with their procurement problems, was established May 10, 1943, by War Food Administrator's Memorandum No. 4. The War Meat Board was established May 15, 1943, to facilitate the handling of the Nation's meat supply.

A Director of Transportation was appointed May 26, 1943. On August 25, 1943, the War Food Administration announced the establishment, effective September 1, of a National War Board.

The following changes in names of some old-line Department bureaus should also be mentioned. In February 1943, certain organizational and structural shifts were

made in the bureaus comprising the Agricultural Research Administration in the course of which the Bureau of Home Economics with the addition of the Division of Protein and Nutrition Research, formerly of the Bureau of Agricultural Chemistry and Engineering, became the Bureau of Human Nutrition and Home Economics; the Bureau of Agricultural Chemistry and Engineering became the Bureau of Agricultural and Industrial Chemistry, with the four Regional Research Laboratories now comprising most of it; and the Bureau of Plant Industry became the Bureau of Plant Industry, Soils and Agricultural Engineering.

Greater and Greater Food Production

During 1943 farm food production, as well as farm production generally, again set a record. The Department and the War Food Administration regarded food as a munition of war.

A new farm production record was set for 1943 and new goals were developed for 1944. The price stabilization problem occupied much attention. The Commodity Credit Corporation greatly expanded its operations in response to wartime emergency needs. Government food procurement was stepped up enormously and rationing was applied to a number of foods.

Peace and the World View

The world viewpoint assumed by the Department is significant of the way in which science had shrunk distances. Agriculture now had to be considered, not only in relation to domestic industry, but in the light of world finance and the plans of the United Nations as well. The world organizations of agriculture came into the picture with the meeting of the United Nations Food and Agriculture Conference,

at Hot Springs, Va. in May and June 1943. The constitution for the Food and Agriculture Organization was already being proposed.

During the war many new discoveries and ideas, ranging all the way from the natural to the social sciences, which had resulted from research, but were restrained from full utilization by the long depression, came into their own and could be used at top efficiency. Among these were better varieties of plants and animals, better protection from insect pests and plant and animal diseases, expanding mechanization, improved cultural and fertilizing methods, increased storage of fertility in the soil by the widespread use of conservation measures, the farm security device of supervised loans which gave borrowers funds and expert advice together in one package, and the use of price incentives and other economic devices to get the needed crops at the right time.

But, as peace approached, War Food Administrator Jones saw the need for reorganization and reconsolidation, and he resigned and returned to the bench that this might take place. Secretary Wickard at the same time became head of the Rural Electrification Administration.

On July 1, 1945, Clinton P. Anderson took office as Secretary, to have charge of both the Department of Agriculture and the War Food Administration, and to consolidate and organize them as he thought best. He regarded himself as primarily a businessman rather than a farmer, though he grew up on a farm, and also operated 800 acres of irrigated land in New Mexico as a dairy enterprise. In addition, he retained direction of the home farm of 640 acres, near Mitchell, S. Dak. At the time of his appointment he was a member of the U. S. House of Representatives, serving his third term, and had been chairman of a committee investigating food shortages. Born at Centerville, S. Dak., he was educated at Dakota Wesleyan and at Michigan universities. The first job facing him was departmental reorganization.

On June 29, 1945, the President, by Executive Order No. 9577, provided for the abolition of the War Food Administration and for the transfer of its functions to the Department of Agriculture. In Memorandum No. 1106, July 3, 1945, the Secretary

announced the appointment of a Committee on Reorganization, Milton S. Eisenhower, chairman. Its duty was to confer with all agency heads, and so to integrate the War Food Administration and the Department of Agriculture as to avoid overlapping, duplication, and inefficiency in service to the public. Secretary's Memorandum No. 1118, August 18, 1945, announced the establishment of a Production and Marketing Administration which was, in effect, a consolidation of many agencies.

Famine Overseas and Its Relief

The President's 9-point Famine Relief Program was announced February 6, 1946, and the Department immediately began to take steps to launch it. Review of the Department's food programs was ordered February 15 and revision of 1946 farm-production goals on February 21.

The Famine Emergency Committee, after an all-day session at the Department, announced on March 11, its specific recommendations for the conservation of wheat, wheat products, and food fats and oils.

On April 9, a report by Herbert Hoover to the Famine Emergency Committee on European food needs was released and the next day the Secretary issued a call for world aid in the food fats and oils crisis.

New Legislation

The Research and Marketing Act, which became law August 14, 1946, provided for extension and expansion of Department research programs. The Farmers Home Administration Act became law the same day, abolishing the Farm Security Administration as such, establishing the Farmers Home Administration, and giving it various functions and responsibilities, including some which formerly lodged in the

Farm Credit Administration.

In late 1946 an outbreak of foot-and-mouth disease was discovered in the Republic of Mexico and it rapidly spread over that country. Special legislation and the consent of the Mexican Government enabled the United States to cooperate with her nearby neighbor in efforts to stamp out the infection before it reached our livestock. This campaign began in 1947, and ended in 1952.

From the beginning to the end of his administration Secretary Anderson called for practically all-out farm production; this he did regardless of what curtailment plans industry might undertake. He consistently praised the ability, industry, and integrity of the Department's information work and differentiated sharply between it and propaganda. He resigned May 10, 1948, to run for the Senate.

Further Changes

Secretary Anderson was succeeded in office by his own Assistant Secretary, Charles F. Brannan, a career employee he highly recommended for the office. A native of Denver who graduated from the University of Denver Law School, Mr. Brannan specialized in irrigation and mining cases in private practice until he became an assistant regional attorney for the Resettlement Administration, in 1935. Two years later he became Regional Attorney for the Department's Office of the Solicitor, with headquarters still in Denver.

In 1941, Mr. Brannan became Regional Director of Farm Security Administration for Colorado, Wyoming, and Montana, still in his native city.

In 1944 he was called to Washington to become Assistant Administrator of Farm Security Administration, and was appointed Assistant Secretary of Agriculture two months later. As Vice Chairman of the Department's Program and Policy Committee he had much to do with formulating and carrying out policies, and he presented the Department's long-range agricultural program to Congress, in 1947.

He was succeeded by Secretary Ezra Taft Benson on January 21, 1953.

Benson Takes Office

Secretary Benson is a nationally known farm leader and a member of the Quorum of Twelve Apostles, Church of the Latter Day Saints, Salt Lake City, Utah. He was born at Whitney, Idaho, August 4, 1899, the son of George Taft and Sara (Dunkley) Benson.

He was a student at the Oneida State Academy, Preston, Idaho. His later educational career is as follows: The Utah State Agricultural College, Logan, Utah, 1918-21; B. S. from Brigham Young University, Provo, Utah, 1926; M. S. in agricultural economics, Iowa State College, 1927; graduate study, University of California, 1937-38.

Secretary Benson operated a farm in southern Idaho, 1923-29. In 1921-23 he served as a missionary for the Church of Jesus Christ Latter Day Saints in the British Isles and Europe. In 1929-30 he worked as a county agent for the University of Idaho Agricultural Extension Service at Preston, Idaho. From 1930 to 1938 Secretary Benson was extension economist and marketing specialist, in charge of economics and marketing work for the State of Idaho.

In the period of 1939-41 he served as executive secretary of the National Council of Farmer Cooperatives at Washington, D. C. Since 1943 Secretary Benson has been a member of the executive committee and was chairman of the board of trustees, American Institute of Cooperation at the time of his nomination (now resigned). He has been awarded scholarship, Gamma Sigma Delta, honorary society of agriculture, Iowa State College, and a fellowship at the University of California, Berkeley Calif.

He was a member and later the president of the Boise Stake of the Church of Latter Day Saints, Boise, Idaho, and during his stay in Washington, D. C. he was president of the Washington Stake. In 1946 he was named president of European missions for the Church. He serves on two national Boy Scout committees, is now on the executive committee of the National Boy Scouts of America. He has always

been deeply concerned with 4-H clubs and all youth welfare organizations. He belongs to the American Marketing Association, the Farm Economics Association, the Rotary Club, and Delta Nu fraternity. He has been a frequent contributor to agriculture, cooperative, and religious publications. He received the honorary recognition award from the College of Agriculture, University of Wisconsin, in February 1952.

Realignment Orders

Following Memorandum No. 1320 of January 21, 1953, which set up five groups among the agencies for better administration, Secretary Benson on March 10, 1953 by a supplemental memo to Memorandum No. 1320 announced that he was regrouping the Department's services into six groups with the addition of Foreign Agricultural Service with a Director of Foreign Agricultural Service as its head. Thereby the Office of Foreign Agricultural Relations was discontinued.

"This action," stated the Secretary, "will make possible a closer coordination of related activities. All the regrouped agencies retain their present structure with the exception of the Agricultural Conservation Program. This will be transferred from the Production and Marketing Administration and placed with the Research Extension, and Land-Use Group. What we intend is a gradual streamlining of the Department's services in the interest of economy and greater efficiency."

The six groups, the agencies in each, and the officials named to head them:

Research, Extension, and Land-Use--Agricultural Conservation Program, Agricultural Research Administration, Bureau of Agricultural Economics, Extension Service, Forest Service, and Soil Conservation Service; with J. Earl Coke, Assistant Secretary, in charge.

Commodity Marketing and Adjustment--Commodity Credit Corporation, Commodity Exchange Authority, Federal Crop Insurance Corporation, Production and Marketing Administration; John H. Davis, President of the CCC as Director.

Foreign Agricultural Service—R. E. Short, Director

Agricultural Credit Services—Farm Credit Administration.

Farmers Homes Administration, and Rural Electrification Administration; Robert L. Fairington, Acting Director.

Departmental Administration—Hearing Examiners, Library, Office of Budget and Finance, Office of Information, Office of Personnel, Office of Plant and Operations; Richard D. Aplin, Director

Office of the Solicitor—Karl D. Loos, Solicitor

Reconstitution Under Reorganization

Secretary's Memorandum dated June 4, 1953, announced that the Reorganization Plan No. 2 of 1953 had become effective at midnight on June 3. It transfers to the Secretary of Agriculture all functions within the Department not now vested in the Secretary, with certain exceptions. The Plan also provides for two additional Assistant Secretaries of Agriculture, an Administrative Assistant Secretary, and authority to the Secretary to make provisions for the performance of his functions, including any functions transferred under the Plan.

Until such time as any different dispositions may be ordered, the Secretary reconstituted the Department as it existed immediately prior to the effective date of Reorganization Plan No. 2, 1953. All agencies were thereby reassigned all functions transferred to the Secretary as they existed immediately prior to the effective date of the Plan. All actions by such agencies and officers taken prior to June 4, 1953 and still in force immediately prior to the effective date of Plan No. 2 are deemed to remain in force unless and until revoked or modified by proper authority.

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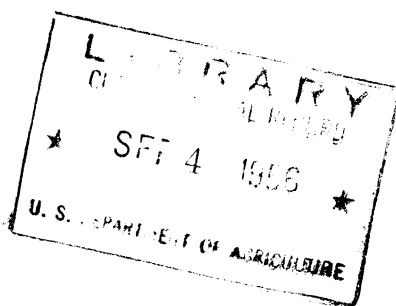
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UNITED STATES DEPARTMENT OF AGRICULTURE
Office of Information

SOME LANDMARKS OF DEPARTMENT OF AGRICULTURE HISTORY

(Condensed Version)

Excerpts herein are based on Agriculture History Series No. 2, as
issued by the Department Committee
of Agricultural History



March 1955

Abridged as USDA Document No. 8

SOME LANDMARKS IN THE HISTORY OF THE DEPARTMENT OF AGRICULTURE

The United States Department of Agriculture grew directly out of the Patent Office which was established April 10, 1790. During the 1830's the newly reorganized Patent Office, then in the State Department, undertook to distribute seeds and collect agricultural statistics. Out of these activities developed the basis for a separate agency devoted exclusively to the interests of agriculture.

The first Patent Commissioner under this new law, Henry L. Ellsworth (1791-1858), was the son of the third Chief Justice of the United States Supreme Court, Oliver Ellsworth. He was born in Connecticut and graduated from Yale in 1810. Ellsworth practiced law, but he also farmed and was a leader in the Hartford County Agricultural Society. He became president of a large insurance company and was active in business and civic life. He resigned as mayor of Hartford in 1835 to become head of the Patent Office on June 15 of that year.

In his annual reports dated January 1, 1838 and 1840 respectively, he requested funds from congress to be used for collecting and distributing seeds and compiling agricultural statistics.

On May 15, 1862, President Abraham Lincoln signed the bill establishing what is now the United States Department of Agriculture as a separate agency with bureau status, headed by a commissioner of its own. On February 9, 1889 the Department was raised to Cabinet rank. Its supervising officer automatically became the Secretary of Agriculture.

At no time in its history could an observer survey the Department and show that it had sprung full-grown from the brow of the bureaucrat. A study of the Department's development reveals instead that its work was expanded by Congressional authorization at successive periods of the country's history, often because different groups of citizens demanded that something be done in the field of agriculture.

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Emergencies, like those created by the rapid rise of technology, widespread animal or plant ills, insect infestations, dust storms, droughts, floods, the exploitation of forests, the necessity for better communication, or economic depressions compel the Government to take action in new fields.

There is nothing new about public aid to agriculture. For the farmer always battled the elements on a precarious basis, and far back in world history, before commercial farming became a reality, government had to aid him every now and then, if only to guarantee the food supply.

Organization and Study Lead to Changes

One of the first signs of the change in American agriculture was the establishment of agricultural and scientific societies by the so-called "gentlemen farmers." The Philadelphia Society for the Promotion of Agriculture was founded in 1785, and George Washington was elected an honorary member on July 4 that year. Washington consistently manifested great interest in agriculture and was often affectionately called "The Farmer of Mt. Vernon."

The suggestions made by Washington were favorably received by his Secretary of State and public men generally. So a committee of the House of Representatives recommended on January 11, 1797, that an agricultural board or society be created, that high Government officials be members ~~ex-officio~~, and that it meet annually. The measure never came to a vote.

In 1819 the Secretary of the Treasury directed consuls to collect seeds, plants, and agricultural inventions for introduction into this country, although there was no appropriation for the purpose.

The agricultural societies were a chief means by which improvements were brought to the notice of farmers. In 1852 there were 300 active agricultural organizations, and by 1860 they numbered over a thousand. Closely related to

their spread was the rise of agricultural fairs and journals. Elkanah Watson held his first real agricultural fair in Pittsfield, Mass. on October 10, 1810, with 26 farmers participating. He then organized the Berkshire Agricultural Society to hold annual fairs, and thereafter fairs rapidly became institutionalized.

"The Agricultural Museum," believed to be the first farm journal in the country, was published in Georgetown, D. C., from 1810 to 1812 as the organ of the Columbian Society. Far more significant in its influence, however, was the "American Farmer" established at Baltimore in 1819 by John Skinner. Farm journals multiplied thereafter, appearing in every State, and all urged farmers to take up new and better methods of husbandry.

Congress also became aware of agriculture in this period, the House establishing a Committee on Agriculture in 1820 and the Senate one in 1825. In addition Congress in 1828 authorized the publication of a manual, prepared by Richard Rush, Secretary of the Treasury. It contained the best available information on the growth and manufacture of silk.

The development of the reaper, the steel plow, the threshing machine, and other implements around this time eventually produced great changes in agricultural technology and in the general economic and social organization as well. The farmer's investment in these machines made it essential for him to increase his income. Thus his dependence on the commercial market increased.

At the instance of Patent Commissioner Henry L. Ellsworth, President Van Buren, in recommending that Congress widen the scope of the Sixth Census, induced that body on March 3, 1839 to permit the Patent Office to expend \$1,000 for the collection of agricultural statistics and for other agricultural purposes. It was natural in these early days that such work gravitate toward the Patent Office, for it was concerned with experimentation and the stimulation of enterprise and invention, and therefore with scientific progress in agriculture.

Governmental aid to agriculture was at last under way. The aid would progress from the increase to the regulation of production; from subsistence to commercial

agriculture; from self-reliance to considerable dependence on guidance by the Government; from the exploitation to the conservation of natural resources; from traditional guesswork to the application of practical scientific knowledge; from uncoordinated individual activity to well-coordinated group action through governmental aid, using the democratic process.

Every successive new function undertaken by the Department of Agriculture will be found outlined in an act of Congress. Hence the expression "The Department of Agriculture did so and so" could be interpreted as an abbreviated way of saying, "The Department of Agriculture, responding to public demand through the execution of work directed by an appropriate act of Congress authorizing this activity, did so and so."

Social and Economic Questions Attacked

At the turn of the century another group of problems appeared. They concerned social and economic questions associated with our decreasing farm exports and the ever-increasing use of agricultural technology. The farmer now needed assistance in his credit and marketing problems as well as in the formation and management of cooperatives. He required adult education in agricultural science which was provided by demonstration farms and later by the Extension Service.

World War I was a period of accelerated exports to Europe, speculative land values, greatly increased acreage in cultivation, and expanded use of Agricultural technology, with a great decrease in the number of horses and mules on farms. Thus millions of acres that had never been cultivated before were plowed up, while millions of other acres formerly used to pasture and grow feed for work animals became available for beef and dairy-herd production.

Return to Earlier Century

On July 4, 1836 when the Patent Office had become a separate bureau of the Government, it occupied rooms in ^{Blodgett's} / Hotel, a three-story building on E. Street, Northwest. In December of 1836 this building burned to the ground and all the patent records along with it. Only in 1840 did the Patent Office get its new building on F. Street, Northwest, now occupied by the headquarters of the Civil Service Commission.

During 1836 and 1837 Ellsworth, at his own expense and without Congressional authorization, had distributed seeds and plants that he received gratuitously for the purpose. Soon the function of seed distribution was to be regularized under Congressional authority. For a long time it consumed most of the Federal funds allocated to agriculture. Ultimately it became almost a disgrace, as certain heads of the Department declared. Congressional seed distribution was not ended finally until June 30, 1923.

Ellsworth felt there was great room for expanding research by selection among wheat varieties, some of which yielded as much as 20 percent more than others. He reported experiments carried on during the preceding summer which had indicated that the Indian corn crop could be improved in yield one-third simply by due regard for seed selection.

Ellsworth's account for 1839 occupied but two printed pages. Herein he remarked that: "The ordinary expenses of the Patent Office the past year, including payments for the library and agricultural statistics, were \$20,799.95."

Congress exhausted itself by its 1839 appropriation, and no grant was made for agricultural purposes in 1840 or in 1841. In 1842 another \$1,000 was made available and this sum was doubled in both 1843 and 1844. It rose to \$3,000 in 1845, but nothing was granted in 1846 and agricultural work was interrupted. There were no lapses thereafter, however.

Commissioner Ellsworth's Reports are of special interest both because of his lively intelligence and of his urgent desire to aid agriculture. His last one, dated January 28, 1845 (he relinquished office on April 30 of that year,) covered activities during 1844 and comprised a book of 520 pages with index. The Commissioner began by citing the low rates of pay in his office.

The Commissioner also mentioned the "electric fluid" again which was now achieving all sorts of things since it had been "confined and tamed." The telegraph annihilated distance. "Paper H" in the book detailed how Professor Page had telegraphed 40 miles. Elsewhere was published a letter from Professor Morse to the Secretary of the Treasury reporting upon the telegraphic transmission of the proceedings at the Democratic National Convention in Baltimore during May 1844. Morse also suggested that the Government take over this new medium of communication and operate it as it did the postal service.

Agriculture Now a Major Study

The science of agriculture had now become a major study in the Patent Office. Abandoned and worn-out lands were being reclaimed. Guesswork and hereditary notions were yielding to scientific analysis and the application of scientific principles. Science however must always persevere. Some scientists had at first claimed that cornstalk sugar was grape sugar, whereas additional tests had proved it to be "equal to the best muscovado sugar." Ells worth felt sure that good sugar would soon be produced by this method on a large scale. It never was.

Edmund Burke became Commissicner of Patents May 4, 1845 and held office till April 30, 1849. During his term the "Report" was greatly expanded and included tables of British and American imports and exports as well as English cotton quotations. In 1846 agricultural statistics were omitted for lack of an appropriation, but in 1847 they reappeared. In 1849 the Patent Office was placed in the

new Department of the Interior. In December 1849, President Zachery Taylor recommended the establishment of a Bureau of Agriculture in the new Department. His message declared that governmental assistance to agriculture was totally inadequate. Congress took no action.

Thomas Ewbank (1792-1870.) reporting for 1849, addressed himself to President Millard Fillmore. Ewbank served as Patent Commissioner from May 19, 1849 until November 8, 1852. Born in Durham, England, he began as an apprentice in the sheet-metal trade. He came to this country in 1819 and was thereafter an inventor, manufacturer, and author. His primary interest was the industrial application of chemistry and physics.

At the direction of the Secretary of the Interior a "practical and scientific agriculturist" was hired to attend agricultural matters in the Patent Office and to prepare the separate agricultural "Report." Daniel Lee, M. D., was appointed. Ewbank omitted agricultural statistics from the volume because he said those hitherto published had been unreliable, and he therefore declined to "waste time and paper in printing crude guesses." He said that Congress or the State legislators should devise methods of getting good statistics worth printing.

Under date of February 28, 1853 Daniel Lee wrote on agricultural progress during the year, his main concern still being the conservation of our natural soil resources. He again accused the cities of seducing farmers into sending them their soil riches in the form of foods and breadstuffs. He said that no generation had the right to destroy the soil, a sentiment echoed by a few other farsighted men many years afterwards.

Lee also insisted that we should have agricultural schools to teach our young the principles of soil-building science. He urged Congress to take action. It was about 1849 that Jonathan Turner of Illinois began his campaign for industrial universities. This was part of the long struggle for popular and agricultural education which finally culminated in the passage of the Land-Grant College Act of 1862.

Continued Flow of Patent Office Reports

Silas H. Hodges, who acted as Patent Commissioner from November 8, 1852 to March 25, 1853, apologized for the inferior character of Lee's agricultural Report that year. R. C. Weightman was Acting Commissioner from March 25 to May 15, 1853. On the next day Charles Mason became Commissioner, and he held office till August 4, 1857. He made Daniel Jay Browne the editor of agricultural reports and specified that statistics were to be omitted until reliable ones were collected.

Charles Mason (1804-82) was born in New York, attended West Point, and then turned to law and journalism. He became Chief ^{Justice} of the Supreme Court of Iowa Territory. After his retirement as Patent Commissioner he was a patent lawyer in Washington, D. C. but subsequently entered politics in Iowa. The Reports during his term of office contained fewer letters from correspondents and more learned essays of substantial character by writers like Joseph Henry and other distinguished men.

Samuel T. Shugert was in charge of the Patent Office until Joseph Holt (1807-94) became Commissioner, September 10, 1857 to March 14, 1859. Holt, a rather remarkable man was born in Kentucky. Buchanan appointed him Patent Commissioner for his aid in a great Democratic victory. He became Postmaster General of the United States in 1859 and was later the first Judge Advocat General and had much to do with the development of our military law and the supervision of court martial.

At this time various groups were agitating for agricultural colleges, free land, and more Federal aid for farmers. If Congress would not appropriate money for the colleges at least it should make provision for them in the form of public land grants. Both movements hit upon the consistent opposition of the southern delegation to Congress which sincerely believed that the doctrine of States rights forbade any such Federal aids. One land-grant college bill did get through Congress during Buchanan's administration, but the President vetoed it because he thought that Federal grants to States were not only extravagant but unconstitutional.

William Darius Bishop (1827-1904,) born in New Jersey, and a former railroad official and member of Congress, was made Commissioner of Patents by President Buchanan March 23, 1859 and served until February 15, 1860, when he went back to railroading and politics. He was followed in office the next day by Philip F. Thomas. Thomas resigned December 13, 1860 without issuing a Report. The 1860 publication was edited by the "Superintendent of the Agricultural Division," Thomas G. Clemson, and from December 14, 1860 to March 28, 1861, S. T. Shugert was again Acting Commissioner.

It was maintained that the United States now needed much more than a mere Agricultural Division in the Patent Office. It now spent \$53,000 a year, had a superintendent, four clerks (including translators and writers,) a curator or gardener, and some aides for the latter.

Increased Recognition Urged

The Report for 1861 was issued in 1862 by the new Commissioner of Patents, David P. Holloway. It was the most complete agricultural manual so far issued by the Patent Office, but it contained no statistics other than a few on milk production. It consisted in the main of essays on the current progress of American Agriculture. There was less material extracted from journals, newspapers, and books. Holloway was appointed March 28, 1861 and served till August 16, 1865, after agriculture had left the Patent Office.

Holloway launched a prolonged and fervent plea for the establishment of an institution to serve agriculture in this country where three-fourths of the citizens were still farmers. He undoubtedly reflected a rising tide of public opinion or he would not have written as he did.

The United States Agricultural Society had been organized in 1852, and it ultimately became the most powerful force urging the establishment of a Federal

Department of Agriculture. A National Convention of Agriculturalists was called to meet in Washington June 24-25, 1852, and the agricultural society was formed as a result. A hundred and fifty delegates were present and Marshall P. Wilder was elected the society's president.

The organization rapidly drew into its membership the leading farmers of the Nation, and its journal was highly regarded and powerful. From the outset it urgently sought public assistance for farmers, and at each meeting it urged the establishment of a Department of Agriculture with a Cabinet officer at its head.

The United States Agricultural Society kept up continual pressure, especially through Charles B. Calvert of Maryland, its member, who was elected to Congress July 4, 1861 and placed on the Committee on Agriculture. Calvert worked for a department, not a bureau, though there was much hostility toward the idea of another Cabinet office being established. It was at one time suggested that the head of the department be elected by the farmers. Meanwhile Morrill was making headway on his land-grant college bill.

In 1859 an Advisory Board of Agriculturist met at the request of the House Committee on Agriculture and after discussion made a report recommending the creation of a Department of Agriculture with a Cabinet officer at its head. This report was suppressed though its main recommendation became known.

Should the new agency be a department or merely a bureau as Lincoln had suggested? Ultimately the House Committee on Agriculture decided in favor of a department in charge of a commissioner, and in such form the bill was finally enacted. It was felt that commercial and manufacturing interests were local in nature so they were omitted from consideration. It was stated they could easily combine among themselves and make their wants felt by the Government, while "Agriculture clad in homespun is very apt to be elbowed aside by capital."

Far-~~Reaching~~ Agricultural Legislation Enacted in 1862

The fact that the Southern delegation no longer sat in Congress naturally facilitated the passage of the bill, because their passion for States rights might well have defeated it. President Lincoln signed the bill May 15, 1862 and it became law. On May 20, he signed the Homestead Act which made provision for apportioning freehold farms of 160 acres each from the public domain to citizens who would make homes on them and till them for 5 years. Then on July 2, 1862 Lincoln approved the Land-Grant College Act fathered by Senator Justin Smith Morrill of Vermont.

The last-named law endowed the colleges with 11,000,000 acres of public land, nearly twice the area of Vermont. The States were authorized to sell the land and use the proceeds to endow their respective agricultural colleges. The States were thereafter to operate the colleges themselves. The law is important constitutionally as marking a beginning of Federal grants-in-aid to the States.

Meanwhile the Department of Agriculture had its origin in the office of Commissioner of Patents Holloway, July 1, 1862, and Isaac Newton (1800-1867,) who since early 1861 had been in charge of the Agricultural Division, became the first Commissioner of Agriculture. It is of interest to observe that public farm aid was not a nationally pulse-quickenning subject in those days, and in the main the gentleman farmers led the agitation for the establishment of the Department.

There was considerable political inertia on the subject, and rural America largely held to the Jeffersonian maxim that the best was the least government. Senator Hale in discussing the proposed department in fact said that the prevailing farmer attitude was: "For Gos's sake let us alone!" There was no compact farm bloc, and professional consultants were not in agreement as to procedure.

The Department had mainly concerned itself with distributing seed, and largely lost the respect of agricultural scientists and journals. It did not appeal to

the actual soil cultivator or dirt farmer for many years. The Nation made no effort for sound land settlement or to control land speculation and exploitation. As a matter of fact no controls were lodged in the new Department. Food was needed for the Civil War, so an unnatural extension of farm-crop belts took place and new machinery was widely utilized. Economists of the day took the farmer for granted or ignored him.

The act establishing the Department of Agriculture in its preamble reads thus:

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, -- That there is hereby established at the seat of Government of the United States a Department of Agriculture, the general designs and duties of which shall be to acquire and to diffuse among the people of the United States useful information on subjects connected with agriculture in the most general and comprehensive sense of that word, and to procure, propagate, and distribute among the people new and valuable seeds and plants.

The original act offers no evidence that any balanced social and economic program for agriculture was desired or much less visualized, at the time. Yet the law was very broad in scope. It gave the Department great latitude and discretion. Meanwhile it would appear that the Department has had ample legal authority for most of its subsequent activities. It is also of interest that the act prescribed the appointment of professionally qualified employees.

Isaac Newton, the first Commissioner of Agriculture, was born in New Jersey but grew up in Pennsylvania. He served from July 1, 1862 until his death in office on June 19, 1867. He was a Quaker of farmer stock and limited formal education. When he grew to maturity he managed two large farms in Delaware County, Pennsylvania, so well that they became celebrated as models. He became an active member of the Pennsylvania State Agricultural Society. In 1854 he purchased a thousand acres of land in Prince William County, Virginia, but the outbreak of the Civil War rendered this venture unsuccessful.

Newton was personally acquainted with Lincoln. One story has it that he delivered milk to the White House. Lincoln placed him successively in charge of agricultural work in the Patent Office and in the Department of Agriculture.

Early in 1863 Newton reported for the first time to President Lincoln. He began by quoting and discussing the organic act of his Department. He also reported that between July 1, 1862 and January 1, 1863 he had expended the sum of \$34,342.27, leaving an unexpended balance of his appropriation of \$25,657.73. He asked Congress to grant him \$130,000 for the fiscal year to end June 30, 1864, "~~which is deemed~~ a low estimate."

Objectives of Department Take Shape

The earliest bound volume of Department of Agriculture publications now in the Department Library begins with a circular from the Commissioner himself on the "Present Agricultural, Mineral, and Manufacturing Condition and Resources of the United States," dated 1862. Next there is a "Catalogue of the Plants, Bulbs, Tubers, for Distribution from the U. S. Propagating Garden," with a report on the "Objects and Aims of the Garden" by its superintendent, William Saunders, dated the same year. Then follows the "Report on the Chemical Analysis of Grapes," by Chemist Charles M. Wetherill, who concluded that our wine grapes were as good as those of Europe. The Commissioner's report for 1863 contained meteorological data supplied by Joseph Henry of the Smithsonian Institution.

Newton mentioned buildings, but not until 1867 did Congress appropriate \$100,000 for building at 12th and B. Streets, Southwest. A stable was erected in 1879, and \$25,000 was appropriated to put up a building for the Seeds Division and the Division of Statistics in 1881. A green-house was erected in 1883,— no more new buildings until 1897.

The Commissioner recommended the founding of a library. One had been

started in the Patent Office in 1840 when a clerk was appointed to gather statistics and useful agricultural material. In 1869 the Department got these books and added them to its own inadequate library. This occupied the entire west end of the first floor of the new Department building. J. B. Russell, the first librarian, was appointed in 1871.

Jacob R. Dodge, who was appointed statistician in 1866, was distinguished in his specialty, and served the Department well for 24 years. Statistics were long regarded as almost a divine revelation and as constituting the physics and physiology of society. Investors and speculators spent huge sums to obtain figures from which to predict market fluctuations. They thought that reliable crop information would set the farmer right up in the world; and that he could foil speculators by withholding his crops from market till the right time. It was a beautiful theory but did not work, partly because too few farmers fully understood the implications of the statistics provided for them.

During the war there had been an era of prosperity in some areas. The Corn Belt had begun to be stabilized in the present area. Wisconsin and Illinois were still the chief wheat-producing States, but the Wheat Belt began to move generally across the Mississippi. The Cotton Belt had also begun to move westward, away from the exhausted lands of the Southeast.

On November 27, 1865 Commissioner Newton reported to President Johnson for 1865. It was a time for world expansion. Some departmental scientists had been sent to Europe and Asia to make observations, and they traveled very economically. In fact ^{Townsend} / Glover had attended the entomological exhibit in Paris at a cost of only \$500.

Chief Clerk John W. Stokes was Acting Commissioner from June 20, 1866 until December 4, 1867 when Horace Capron (1804-85) was appointed Commissioner. Capron was born in Massachusetts, but grew up in New York. In 1836 he erected a cotton mill at Laurel, Maryland, which he later made into a model factory. Upon his resignation as Commissioner June 27, 1871 he went abroad to become agricultural

adviser to the Japanese Government.

Commissioner Capron manifested considerable interest in steam plowing and reported 3,000 steam plows at work in England and only 2 in the United States. Later in the book appeared a 10-page article on the "History of American Inventions for Cultivation by Steam." It was written by a patent examiner and well illustrated. The new Commissioner said he had reorganized the Department, making drastic changes. At this time, January 13, 1868, the Department had about 47 employees.

In 1868 Commissioner Capron could report to President Johnson that the new building was at last completed. It was of Renaissance architecture, 3 stories high, and 170 by 61 feet. Its steam-heating apparatus was reported to be in successful operation. Including furniture and laboratory equipment it had cost \$140,420. Reporting to President Grant for 1870 Commissioner Capron again protested the insufficient remuneration of his staff and asked much larger appropriations. He reported expenditures of \$169,175.24.

President Grant appointed Frederick Watts (1801-89) to succeed General Capron, and he took office August 1, 1871. Watts was born in Pennsylvania of Welsh extraction. He grew up on a farm and acquired a taste for and interest in farming. He studied law and was president of the Cumberland Valley Railroad Company from 1845 to 1871, but he had meanwhile engaged in scientific farming. Watts had experimented with various types of farm buildings and had organized farm societies. He was the first head of the Department to give attention to our timber supply. His reports are dated from 1871 to 1876.

Watts appointed the statistician, J. R. Dodge, to serve also as editor and the latter complained that it was very difficult to get properly qualified persons to compile and edit agricultural reports. The compensation, \$1,200 to \$1,800 a year, was insufficient to attract workers with broad agricultural experience and high literary attainments.

In 1872 the Department had an appropriation of \$197,070 of which all but

\$1,278.82 was expended, but that was said to be sufficient to cover outstanding bills and still leave a small margin for return to the Treasury. In 1873 the Commissioner spoke of the increasing importance of entomology, and noted the cost and extent of insect damage.

Chemist William McMurtrie, was devoting his time to agricultural products. Watts had been annoyed by private individuals who wanted the departmental chemist to test wine, patent medicines, and mine samples for them, and even to give them certificates of merit. Since there had been loud complaints about frauds in commercial fertilizers the chemist was told to analyze some of them and publish the results.

In 1872 when James M. Swank wrote his brief account of the Department's history and development, J. R. Dodge was statistician, William Saunders the superintendent of gardens, Townsend Glover entomologist, Ryland T. Brown chemist, George Vasey botanist, J. R. Russell librarian, and Andrew Glass superintendent of the seed room. The Department had 50 clerks and specialists and 50 messengers, laborers, and other employees.

President Hayes appointed William G. LeDuc (1823-1917) Commissioner of Agriculture on July 1, 1877. The latter was born in Ohio, the son of a French father who had come to the United States to help the colonists in the Revolutionary War. LeDuc had studied law, been admitted to the bar, and had become active in and around St. Paul in the development of the farm country. He served in the Union army and later entered railroading. As Commissioner he established a tea farm and was greatly interested in sugar beets, sorghum, and animal diseases, the last interest culminating in the Bureau of Animal Industry.

Commissioner LeDuc's first Annual Report was for 1877. In it he presented a table to show that the Department of Agriculture received small appropriations as compared with other Federal Government agencies.

In 1879 a Veterinary Division was established to carry out fully the work on animal diseases. Congress had also appropriated \$10,000 for study of the history

and habits of insects. Veterinarians contributed long articles on animal diseases in this 1879 volume. The last report submitted by LeDuc was that for 1880.

LeDuc also wrote that the departmental employees received lower pay than those doing similar work in other Departments. His distinguished chemist received only \$2,000 a year (when he got it) for his "laborious and valuable" services, whereas a chemist who worked a short while detecting fraud in sugar for the Treasury Department received four times that much.

Dr. George B. Loring (1817-91,) of Massachusetts, educated as a physician, but also a scientific farmer and a Victorian-type political orator, was appointed Commissioner of Agriculture by President Garfield, July 1, 1881. Loring had operated a stock farm and had done much to further agriculture throughout his life.

Loring's first volume bears the dates 1881 and 1882. D. E. Salmon, later to be first chief of the Bureau of Animal Industry, and already a distinguished scientist, was in charge of the Veterinary Division. Reports were printed by several veterinarians regarding contagious pleuropneumonia, and agitation was rife for Federal action.

Organization and Growth in 1883 and After

In 1883 the Department consisted of the Division of Gardens and Grounds; the Botanical Division; the Microscopic Division; the Chemical Division; the Entomological Division; the Division of Statistics; the Veterinary Division; the Forestry Division; and the Seed Division.

Not many years later Theobald Smith, F. L. Kilborne, and Cooper Curtice solved the cattle-tick fever puzzle in the Bureau of Animal Industry by proving that the tick was the transmitting agent. This was a fundamental medical discovery of far-reaching importance.

The first report of the Bureau of Animal Industry was in the main devoted to

contagious pleuropneumonia and cattle-tick or southern cattle fever. The bill creating the Bureau was introduced by William H. Hatch of Missouri. Its passage marked a notable extension in the interpretation of the general-welfare clause of the Constitution. Here was a problem that actually transcended the capacities of the States, and individual freedom had to be restricted by the Federal Government for the public welfare.

The Bureau stamped out contagious pleuropneumonia in 5 years, a world record for its control and a tremendous boon for livestock men. The Bureau thereafter performed a long line of outstanding scientific research on hog cholera, hookworm, bovine tuberculosis, anthrax, blackleg, cattle-tick fever, contagious abortion, and many other animal and fowl diseases.

We come now to the last Commissioner of Agriculture who was also the first Secretary of Agriculture, Norman J. Colman (1827-1911) of Missouri. He was appointed by President Cleveland to take office April 3, 1885, and his first Report is dated that year. Colman was born in New York; taught school, studied law, and fought in the Civil War. After the war he started "Colman's Rural World" in St. Louis. He was elected to the Missouri State legislature and manifested much interest in the State university and served in many agricultural organizations

Colman was appointed because of his broad knowledge of agricultural problems and was almost certainly the most competent head the Department had up to that time. He was largely instrumental in effecting the passage of the Hatch Act which founded the State agricultural experiment stations and gave the Department its second Bureau, the Office of Experiment Stations.

Largely through Colman's interest a meeting was held in 1883 to consider the establishment of State experiment stations with Federal aid and a permanent organization was effected at the third meeting in 1887 - the Association of American Agricultural Colleges and Experiment Stations. The agricultural societies, especially the Grange and similar agencies, clamored for action. On March 2, 1887 the Hatch Bill was passed establishing the first national system of agricultural

experiment stations in the world and setting up the Office of Experiment Stations in the Department of Agriculture to coordinate their efforts. This authorization of combined Federal and State work naturally required some departmental reorganization.

W. O. Atwater was made Chief of the Office of Experiment Stations and A. C. True was associated with him.

The Department had received scant praise in its career so far. The farmers could not well apply the knowledge they had received in the form in which they received it. That was a gap which the Extension Service filled a decade or so later. Congress must give the Department scope for educational, economic, and social as well as scientific functions.

Emphatic Agitation for Cabinet Rank

The 50th Congress (December 5, 1887 - March 3, 1889) was simply deluged with petitions and memorials asking that the Department be given Cabinet rank. This was not altogether new agitation; it had gone on periodically for 30 years. Bills had even been introduced and occasionally passed by the House of Representatives to give The Department cabinet rank. Finally the Hatch Bill was passed and signed. Commissioner Colman was nominated and on February 13 confirmed as the first Secretary of Agriculture. The sources of lawmaking are ^{very} clear in this instance. Congress created the Department of Agriculture because of the hard effort, ceaseless agitation, and widespread expression of views by those who favored such legislation.

Colman left office with Cleveland. The incoming President Harrison appointed Jeremiah M. Rusk (1830-93,) and he assumed office on March 7, 1889. Rusk had been born on a farm in Ohio, but in 1853 he went to Wisconsin to keep a tavern. This venture was a success so he started a stage line which was also profitable, and in time he became Governor of Wisconsin. His period as Secretary of Agriculture was

marked by the eradication of destructive cattle diseases, and the passage of legislation for the inspection of meat. Rusk's particular contribution was his recognition of the importance of publicity and his ability to engage the interest of the press in departmental activities.

Secretary Rusk promptly reorganized the Department. He retained direction of the executive work himself and placed the scientific work under the first Assistant Secretary provided by Congress, who was Edwin Willets. He set up a Division of Records and Editing and urged the frequent publication of the results of scientific work in clear language that practical farmers could readily understand. The publication of Farmers' Bulletins therefore began. Rusk also began a systematic investigation of foreign markets for American farm products. He indicated that our farm exports were not so profitable as they once were.

The Department of Agriculture consisted of the following branches in 1889: Division of Statistics; Division of Entomology; Division of Chemistry; Section of Silk Culture; Botanical Division; Section of Vegetable Pathology; Division of Economic Ornithology and Mammalogy; Division of Microscopy; Office of Experiment Stations; Forestry Division; Division of Gardens, Grounds, and Horticulture; Seed Division; Division of Pomology; Folding Room Library; Museum; Bureau of Animal Industry.

In 1891 the Weather Bureau became the Department's third unit of bureau status. It had been transferred from the War Department, because the public considered that civilian control would make it more useful to agriculture and commerce. Since the Department had long carried on meteorological work the transfer was appropriate.

Cleveland, returning to the Presidency, appointed J. Sterling Morton (1832-1902) Secretary of Agriculture. He assumed his post March 7, 1893. He was born in New York and enjoyed the "distinction" of having been expelled from the University of Michigan for his independence. He had located in Nebraska City where he became a politician and editor of a newspaper. Morton had long been a student of agriculture, and had owned and worked a Nebraska quarter-section. He had a passion for

tree planting and became the founder of Arbor Day. As Secretary he emphasized economy and so objected to free seed distribution that he actually put a stop to it at one time.

Reporting for 1893, the secretary advocated better departmental organization and gave some information about foreign agricultural departments. He said that the classified civil service was defective because there was too much injustice in rank and pay. Secretary Morton commented that the act creating the Department had provided it with no building. The main structure erected in 1867 to accomodate 50 people in 4 divisions was now far too small.

The formation of the Dairy Division and its initial operation were described in Morton's 1895 Report. Henry E. Alvord was its first chief. Civil Service status had been extended to the Department's 2,019 employees by Presidential order dated May 24, 1895, which included all of them except the Presidential employees and common laborers. The Department now had 429 female employees.

In his final statement, that for 1896, Morton recorded that the Department's annual appropriation was \$2,583,750.

The Secretary consistently operated the Department economically and turned money back to the Treasury. He was very hostile to seed distribution and insisted it be abolished, and had actually tried to stop seed distribution by injunction. Seeds to the amount of two million dollars in retail ^{value} had been sent out in competition with those sold by retail seedsmen. Later the seedsmen were given the business of making the distribution themselves which mollified them.

The Secretary gave the average age of the chief of his scientific bureaus as 42 years and 3 months, the oldest being 51 and the youngest 29. He said that their salaries of \$2,500 and the \$1,800 paid their first assistants were insufficient. Even the directors of the State experiment stations received more. Turn-over was high because the scientific staff was underpaid..

At this point Secretary Morton left office and James Wilson of Iowa was appointed his successor by President McKinley, taking office March 7, 1897.

Secretary Wilson (1836-1920) was born in Ayrshire, Scotland; he came to the United States in 1851 and chose farming as his life work. He early became a community leader in Tama County, Iowa, was elected to the legislature, and also served three terms in Congress. In 1891 he was made professor of agriculture and head of the experiment station in Iowa State College. Henry Wallace, father of Henry C. and grandfather of Henry A., suggested his name to President McKinley for Secretary of Agriculture. Wilson continued in office for 16 years, remaining under Presidents Theodore Roosevelt and William H. Taft.

Turn of Century Sees Great Advancement

Farm demonstration and cooperative extension work were undertaken during Secretary Wilson's term and a small army of experts and scientists was employed. The Department grew into a magnificent research regulatory, educational and custodial institution, each manifestation of growth representing an effort to provide the services demanded by the public and authorized by Congress. Not only did research in the natural sciences attain very high quality under Secretary Wilson, but social and economic studies advanced rapidly.

While James Wilson held office urban influences on rural life rapidly intensified. Means of transportation and communication vastly improved. The increasing manufacture of automobiles and the improvement of roads gave farmers new access to markets. Competition grew keener and farm credit became an acute problem. The numbers of people engaged in farming grew steadily less. In 1910, only 32.2 percent of all persons gainfully employed were in agriculture, and the estimated average equity of farm operators in the land they tilled was 50 percent.

In his report for 1899 Wilson started the custom of beginning with brief items summarizing the year's outstanding accomplishments. Atwater now had a flow of nutrition bulletin appearing, and Wiley reported on food preservatives. N. E.

Hansen, M. A. Carleton, Water T. Swingle, and David Fairchild were mentioned as plant explorers.

At the turn of the century in 1900 Secretary Wilson expressed his determination of bringing scientists to the aid of farm producers, and to this end 21,000,000 copies of departmental publications had been distributed.

In 1901 the Secretary effected the long-needed reorganization of related departmental units into bureaus. The Bureaus of Plant Industry, Chemistry, Forestry, and Soils were created with chiefs at \$5,000 each. B. T. Galloway became the first head of the Bureau of Plant Industry and Harvey W. Wiley headed the Bureau of Chemistry. Milton Whitney became chief of the Bureau of Soils which took over all work on soil surveys, soil analysis, soil technology, and drainage investigations. Gifford Pinchot was made Forester.

Farm Demonstration Experiments Begin

In the report for 1902 we find first mention of the farm-demonstration experiments undertaken to show the value of using scientific cultivation methods on selected "demonstration" farms in various communities. This novel and important idea originated with Seaman A. Knapp of the Bureau of Plant Industry. Ultimately the Extension Service was organized to carry adult education in agriculture right to farmers on their own farms. At that time, though, agricultural editors and farmers' institutes were pioneering in this work that later became an organized governmental activity.

The appearance of the cotton boll weevil speeded Dr. Knapp's farm-demonstration work, as the weevil produced a crisis in cotton production. Texas especially appealed loudly for Federal aid. At one huge mass meeting in Dallas half a million dollars was demanded to fight the weevil. The farm-demonstration method proved an

ideal means of instruction. Dr. Knapp also won praise for the 250,000 acres of rice growing in Texas from varieties he had introduced.

In 1904 Secretary Wilson made reference to farmers as our greatest source of natural wealth and said that well-being was generally diffused among them. The Bureau of Entomology with L. O. Howard at its head had been established in accord with recommendations made the year before. It was aiding the rapid spread of farm-demonstration work to cope with the boll weevil. The Weather Bureau announced that it would interpret "the language of the sun" at Mt. Weather.

On February 1, 1905 custody of the national forests was transferred to the Department and fused with its Bureau of Forestry to form the Forest Service. The Bureau of Chemistry reported that it had lost many employees due to the low salaries paid. It was studying food poisons and standards and cooperating with the Postoffice Department in protecting the mails from makers of fake remedies. The Bureau of Statistics had considerably improved its crop reporting, and the Office of Road Inquiry became the Office of Public Roads.

In 1906 the Department reported an annual appropriation of \$7,175,690. There were 1,594 employees in Washington and 4,648 in the field. The new East and West Wings of the present Administration Building were nearly complete but by no means large enough.

Dr. Wiley had helped in effecting the passage of his Food and Drug Law on June 30, 1906 and the Bureau of Chemistry was charged with its enforcement. A force of chemists and inspectors had to be appointed, and before long the number of employees in the Bureau of Chemistry was doubled.

Agricultural science had enormously increased production, but this increase was accompanied by a reduction in farm exports and a diminishing rate of population growth. However, farmers could always provide sufficient food for our population, so the Secretary seemed satisfied with conditions. He praised farmer cooperatives as well as the rapid extension of the Farmers Cooperative Demonstration Work.

Country Life Commission a Landmark

President Theodore Roosevelt appointed his Country Life Commission in 1908. The Commission held 30 hearing throughout the nation. In various ways it sought aid from over 100,000 persons. Dr. L. H. Bailey of New York was its chairman. The other members were Henry Wallace of Iowa; Walter Hines Page, who later became war-time ambassador to Great Britain; Gifford Pinchot, the great Forester and later Governor of Pennsylvania; and Dr. Kenyon L. Butterfield of Massachusetts Agricultural College.

The Commission held that a new race of teachers should appear in the country and that a new rural clergy be trained. It suggested increased farmer cooperation, the promotion of rural social advantages, and the expanding of efforts to make country life more "gainful" and more rewarding. It recommended that inventory be taken of our rural resources from the soil up, that a united campaign be instituted for rural progress, and that the extension work be organized on a national basis through the State colleges of agriculture.

It was in 1908 as well that serious study of farm economics was undertaken in the Bureau of Plant Industry with W. A. Peek in charge. The subjects of investigation were farm accounts, farm records, and the economic value of using farm equipment.

By this time the Department was enforcing food, game, drug, bird, livestock, quarantine, and meat-inspection laws, and many others besides. Its work had to expand constantly, as Congress passed new laws and charged the Department with their enforcement.

Farm cooperative demonstration work was widespread now seven years after its inception, and farm children also were being organized in clubs. Farm economic studies continued in the Bureau of Plant Industry where "farm problem or extension work" began. Trained men were being sent out as teachers. W. J. Spillman

spread this farm demonstration work to the North and West; in 1911 he helped establish the first Farm Bureau. Bradford Knapp, son of Seaman A., carried on the farm cooperative demonstration work in the South.

Dynamic Era in The Department

It may truthfully be said that when Secretary Wilson left office with President Taft, a definite era in the history of the Department of Agriculture ended. The incoming President Woodrow Wilson appointed the historian, economist, financier, and former college president, David F. Houston, Secretary of Agriculture. The appointment was an appropriate one at this juncture of the Nation's agricultural affairs. Secretary Houston had received a master's degree in government at Harvard. He taught at the University of Texas after which he became president of the land-grant college of that State.

In general it may be said that Secretary Houston ushered in a period when the Department devoted much more attention than before to broad social and economic issues affecting farmers. As he said in his report for 1913: "We have unmistakably reached the period where we must think and plan." Nevertheless study of the evolution of agricultural policies indicates marked continuity throughout. When changes occur the new will be found to have its roots fixed firmly in the old--in some research or fact finding investigation that went on much earlier.

Houston realized that farm-management studies could no longer be carried on effectively in the frame of reference of the Bureau of Plant Industry. He recognized the great importance of the extension work and understood that it should function more independently. He asked and acted upon the advice of such men as Thomas N. Carver of Harvard, George F. Warren of Cornell, Andrew Boss of Minnesota, H. C. Taylor of Wisconsin, James A. Foord of Massachusetts Agricultural College, John I. Falconer of Ohio State, and Richard L. Adams of the University of Cali-

formia. He inaugurated the "New Freedom" period which actually extended to the death of Henry C. Wallace.

Finally Secretary Houston saw the necessity for greater centralization within the Department and set up a number of staff agencies to effect integration. Originally the Department consisted largely of independent research sections and divisions which generally pursued thier own ways.

In response to long-continued agitation and in recognitions of the new emphasis on distribution in agriculture, Congress had provided for specifically, in its appropriation for 1913-14, the acquiring and diffusing among the people, useful information on subjects connected with the marketing and distribution of farm products, and made \$10,000 immediately available. To carry out the intention of Congress Secretary Houston established the Office of Markets, attached directly to his office. Under the leadership of Charles J. Brand it rapidly became one of the spearheads in the vigorous attack on economic and social problems.

In 1914 the Office of Markets was assuming much enhanced importance. The Cotton Futures Act has been passed. Studies of rural credit were under way and better dissemination of information has been effected. The Smith-Lever Agricultural Extension Act was passed on May 8, 1914, and the Extension Service was being organized to carry out its provisions. It provided for the use of personal-contact teaching methods to be financed by the grants-in-aid. Formal agreements between the Department and the land-grant colleges had to be effected. The Office of Information was created.

By 1916 work on marketing, finance, and rural organization mapped in earlier reports, was well under way. Acts establishing standards for staple agricultural products shipped to market, as well as the grain futures, grain standards, warehousing, and Federal farm-loan and Federal-aid road laws had all been passed. The loan act was especially designed to create a banking system tailored to rural needs.

World War Brings Drastic Changes

By 1917 Houston was stressing all efforts to increase farm production for domestic use and export. The Food Administration was started with Herbert Hoover in charge. The cooperative Extension Service sprang into new usefulness in showing farmers how to increase food production to win the war. An additional appropriation of over 4 million dollars was made to expand this work. Farmers responded vigorously, struck the plow into land hitherto untilled, and won praise for it. Home economics work, Federal and State, increased in importance under impact of war conditions.

A record acreage had been planted by 1918 and crop yields had been stimulated in all practicable ways. Every agency was pushing this work. Authority was now granted to use motion pictures for purposes of agricultural education. Interest in farm land increased, land speculation got under way, and farm values shot up miraculously, tempting farmers to top-heavy mortgage indebtedness.

The day following Secretary Houston's resignation to become Secretary of the Treasury, February 2, 1920, Edwin T. Meredith, an Iowa Farm Editor, became Secretary of Agriculture. The latter served until March 4, 1921 and made the report for 1920, in which the farmers were still being praised for glorious wartime service. But Secretary Meredith advised farmers that they now faced a declining market, with shrinkage of land and other values, and the Secretary admitted that there was no simple solution for this complex problem. World conditions were chaotic.

In 1922 President Harding called an agricultural conference in Washington; the Grain Futures Act was also passed this year. The surplus became the chief agricultural problem; it was at first attacked as a marketing, and later as a marketing and production problem.

On March 5, 1921 President Harding appointed Henry C. Wallace, father of Henry A. Wallace, to be Secretary of Agriculture. In his first report, for 1921, Wallace

frankly recognized the dangerous nature of the farmer's position with overexpanded acreage, inflated land values and an uncertain foreign market confronting him, and an industrial depression under way. The farmer was said to produce on faith and take great risks, and his 1920 crops were produced at the greatest cost known.

Marketing was now seen to be an integral part of production, though scientific research was still regarded as basic, and a Director of Scientific Work was appointed. Henry C. Taylor became chief of the new Bureau of Agricultural Economics on July 1, 1922. Work in home economics was also still increasing in importance. Wallace warned that no new land should be opened to cultivation and recommended intensive, cost-lowering methods to farmers.

Secretary Wallace died in office October 25, 1924, and Assistant Secretary Howard M. Gore immediately became Acting Secretary. He was appointed Secretary of Agriculture November 22, 1924, and served until March 4, 1925 when he resigned to become Governor of West Virginia. The 1924 volume was prepared under the direction of Secretary Wallace; Gore transmitted it as Acting Secretary.

The Bureau of Dairying was established by act of Congress of May 29, 1924. The dairy industry had asked for the establishment of a bureau to consolidate work in this field.

It almost seemed as if the departmental research workers had overreached themselves. Set to lowering the unit costs of agricultural production and to improving yields, they had succeeded so admirably as to aid in producing enormous surpluses.

Only 21.5 percent of all our people gainfully employed were engaged in agriculture in 1930 and the estimated average equity of farm operators in the land they farmed was only 41 percent. The latter figure dropped to 39 percent 5 years later. The agricultural export market suffered increasingly serious competition; the day of loans to Europe had passed, and our own tariff walls not only effectively shut out foreign goods but stimulated similar action on the part of other nations. The

highly protective Hawley-Smoot Tariff Act was passed in 1930.

Industrial Prosperity Masks Real Conditions

On March 5, 1925, William M. Jardine, President of the Kansas State College of Agriculture, took office as Secretary of Agriculture and served until March 4, 1929. During his term ominous conditions in agriculture were somewhat masked by the spurious and highly specialized industrial and financial "prosperity."

Agricultural exports were said to have increased. The farm-credit situation was regarded as bad, the small farmer suffered, and local agricultural credit organizations were suggested as a remedy. In some regions it was held there was actually lack of confidence in future expansion.

Agricultural pressure groups also recommended the passage of laws to authorize the setting up of agricultural credit corporations and for expanding livestock grazing rights in national forests. Investigations were already under way on high freight rates and farm taxes, and it was insisted that the tax load must be in part removed from farm property. The Department also saw that it must aid in the business organization, management, and operation of farm cooperatives, as well as the education of farmers in regard to them.

In 1927 the farm problem was still acute. The Secretary suggested that wastes be cut, production costs diminished, the margin between producer's cost and consumer's purchasing price lessened, the costs of transportation and distribution reduced, the tax burden redistributed to help reduce the farmer's overhead, and that farmers cooperate to enhance their bargaining power. What should be done was clear clearly seen; how to do it remained puzzling.

Cooperative marketing had made progress, but united farmer action would be required to adjust production to demand. The problem of land utilization had assumed importance. This was directly counter to the traditional trend of individual

exploitation of land resources. We had more acres in cultivation now than we needed.

The cumulative pressure of agricultural problems increased continually. In 1929 general panic and depression burst on the country. Arthur M. Hyde, a former Governor of Missouri, became Secretary of Agriculture March 5, 1929 to serve until March 4, 1933. His first report reviewed the agricultural industry as a whole and the several crops specifically.

Meanwhile the Federal Farm Board had been organized. An adjunct of the Department, the Board had authority to create commodity stabilization corporations and to recognize and collaborate with farmer cooperatives. It could make loans from a half-billion-dollar revolving fund, but it had no control over production or acreage.

"The 1930 Drought" was the first subhead in Secretary Hyde's report for that year. The effects were so extended that relief would be required. The Red Cross had given aid, and Congress made emergency loans of 6 million dollars available both in 1929 and in 1930, although \$4,580,683 of the first 6 million dollars had already been repaid.

The Secretary contended once again that the tariff act of 1929 aided farmers by protecting their domestic market. On June 5, 1930 Congress provided for an expansion of the foreign agricultural service. The Bureau of Dairying was now the Bureau of Dairy Industry. The Grain Futures Administration made a separate report again. M. S. Eisenhower signed a report as Director of the Office of Information.

In the 1931 volume world influences were accused of depressing American agriculture which lacked a foreign market and was therefore surplus-burdened. Agriculture would positively benefit from the high tariff just as soon as we learned to quit producing for an export market that no longer existed.

The Department's basic task was still held to be scientific research, the results of which were not intended so much to stimulate production as to help balance supply and demand, guarantee the dependability of production, raise living

standards, and aid industry as a whole. This research also helped find new uses for agricultural commodities, thus founding new industries and spreading employment. It also improved the quality of commodities.

The Department had been a pioneer in developing wise land use policies; it had formulated the entire theory. A National Land Use Conference had been held in Chicago at its suggestion where all relevant ideas were discussed and programs were mapped out. The farm plant was still too large and land submarginal for agriculture simply contributed to tax delinquency, hence it must be kept out of cultivation. Soil erosion also must be stopped. Secretary Hyde said that the recommendations made by the conference on land use would be carried out.

Henry A. Wallace

On March 3, 1933 Henry A. Wallace, an Iowa farm editor and son of Henry C. Wallace, became Secretary of Agriculture. Actions taken at this time had roots in the research, the discussion, and the social and economic thinking carried on in the Department during the previous decade.

Congress accordingly passed the Agricultural Adjustment Act, approved May 12, 1933. Here again, it should be noted, there was no sharp break with the past. The ideas in that act had been mulled over frequently within as well as outside the Department. W. J. Spillman had some of the notions in his "Balancing the Farm Output" published in 1927, and M. L. Wilson, also previously an employee of the Department, was in part responsible for drafting the act. Howard R. Tolley and Charles J. Brand, also associated with the legislation, were not new to the Department.

Named as co-administrator of the Agricultural Adjustment Act with Mr. Brand, George N. Peek of Moline, Ill. had been another advocate of new methods of coping

with the farm surplus problem. These men, together with a Department economist, Mordecai Ezekiel, had much to do with pioneering the new era of adjustment and departure from precedent.

The Adjustment Act, as Secretary Wallace analyzed it in his first report, sought to raise the income of farmers in two ways. (1) Production was to be adjusted to demand. (2) The Secretary of Agriculture was to enter into marketing agreements with producers, processors, and distributors of agricultural products, in order to eliminate competitive wastes, improve trade practices, move surpluses into the market, and raise producers' prices.

The Agricultural Adjustment Act, generally referred to as the A.A.A. necessarily provoked thoughtful criticism as well as approval. In his report for 1935, Secretary Wallace considered a number of the issues that had been raised. He denied that the measure sought to create artificial scarcity. Given a rising demand for a particular commodity, production would be increased accordingly. The long-term objective of the program was to prevent recurring cycles of over and underproduction.

The Secretary reported that the stock of surpluses had been sharply reduced. This was due partly to the production curtailments of the national farm program. Another very important factor was the drought of 1934, which was the worst ever recorded in the United States. It extended over 75 percent of the country, severely affecting 27 States.

It was announced that several important changes had been made in the organization of the Department. The position of Under Secretary of Agriculture had been created and Rexford G. Tugwell appointed to fill the post. There was no longer to be a Director of Scientific Work, and an Office of Budget and Finance had been created.

In January 1936 the Supreme Court in the Hoosac Mills case invalidated the compulsory features of the Agricultural Adjustment Act. Congress thereupon passed the Soil Conservation and Domestic Allotment Act. The Annual Report for 1937 contains

a detailed description of this measure and the steps taken by the Department to enforce it. The discussion is prefaced by a noteworthy analysis of our national agricultural policy.

An altered economic world called for a new agricultural policy. But the link between the old and the new was direct and close. The old exploitation forced the new conservation. The Federal Farm Board, the McNary-Haugen plan, the A.A.A. programs, and the Soil Conservation and Domestic Allotment Act had one basic characteristic in common. They all recognized that modern problems cannot be solved by ancient formulas, and that agricultural policy today is necessarily in large measure the opposite of what it was in the period of the open frontier.

Secretary Wallace's final report cited the unpromising export outlook and the ominous rise of economic nationalism. It detailed the wide variety of defense functions the Department was performing and could perform. On September 4, 1940, Secretary Wallace resigned his post to become a candidate for the Vice Presidency. Under-Secretary Claude R. Wickard of Indiana became the next head of the Department.

It was the Agricultural Adjustment Act of May 12, 1933, which ushered in much new legislation that resulted in the setting up of the so-called "action agencies" of the Department. This act was designed to establish and maintain such balance between the production and consumption of agricultural commodities, and such marketing conditions therefor, as would reestablish prices to farmers at a level that would give farm products the purchasing power they had in specified earlier base periods. The base period for most commodities was 1909 to 1914.

Some of the legislative acts authorizing other parts of this action program were as follows: The Emergency Farm Mortgage Act of 1933; the Farm Credit Act of 1933; the Federal Farm Mortgage Corporation Act and the Jones-Costigan Sugar Act of 1934; the Soil Erosion Act of 1935; the Soil Conservation and Domestic Allotment Act, the Rural Electrification Act, and the Flood Control Act of 1936; the Agricultural Marketing Agreement legislation, the act placing the functions of the Federal Surplus Commodities Corporation in the Department, the Bankhead-Jones Farm Tenant

Act, the ~~Norris-Doxey~~ farm forestry legislation, the ~~Pope-Jones~~ water-facilities legislation, and the Sugar Act, all of 1937; and the Flood-Control Act, the Agricultural Adjustment Act, and the Federal Crop Insurance Act of 1938.

Some of these agencies were created as independent establishments and later came to the Department where some of them have since undergone changes in name and structure. The Farm Credit Administration was created in 1933, but became part of the Department only on July 1, 1939. The Rural Electrification Administration was set up as an independent agency on May 11, 1935, and came to the Department July 1, 1939. The Commodity Credit Corporation was established October 17, 1933, and was placed in the Department July 1, 1939.

Second World War

Secretary Wickard was an Indiana dirt farmer. He graduated from Purdue with a degree in animal husbandry and, even before that, began helping to operate the family farm settled by his great-grandfather in 1840. He continued to manage the farm after he came to Washington in 1933. Before that he had been a member of the Indiana State Legislature. He was a member of the National Corn-Hog Committee of Twenty-Five which helped establish the original corn-hog program of the Agricultural Adjustment Administration.

In 1935, Mr. Wickard became chief of the Agricultural Adjustment Administration corn-hog work, thus being the third future Secretary to work in the Department in a subordinate capacity before assuming that office. When the Agricultural Adjustment Administration's agricultural conservation program started in 1936, Mr. Wickard became assistant director of the North Central Division. He was appointed Under Secretary of Agriculture on February 1, 1940.

On March 29, 1943, Chester C. Davis became the first War Food Administrator,

serving until he resigned June 28, 1943; he was succeeded by Judge Marvin Jones, who served until the War Food Administration was recombined with the Department of Agriculture by Executive Order effective July 1, 1945. Mr. Wickard became head of the Rural Electrification Administration at this time.

An Office of Agricultural Defense (later War) Relations was set up in the Department on May 5, 1941, in response to a letter from the President. On July 5, Secretary's Memorandum No. 921, established State and county defense boards. On December 13, 1941, there was announced a major reorganization of the Department to streamline it for the war effort. This was validated by an Executive Order dated February 23, 1942. At this time three large administrations were established as follows: The Agricultural Conservation and Adjustment Administration was created by merging activities of the Agricultural Adjustment Administration (later Agricultural Adjustment Agency,) the Soil Conservation Service, the Federal Crop Insurance Corporation, and the Sugar Division.

The Agricultural Marketing Administration was created by merging the activities of the Surplus Marketing Administration, the Commodity Exchange Administration, the Agricultural Marketing Service, and the Consumers' Counsel Division of the Agricultural Adjustment Administration.

The Agricultural Research Administration was created by grouping the activities of seven old-line scientific bureaus and agencies concerned with research and regulatory work, four Regional Research Laboratories, and nine Bankhead-Jones Laboratories. The Agricultural Research Center at Beltsville, Md., was also placed under the supervision of the Administrator.

On June 9, 1942, the White House announced the appointment of a Combined Food Board, composed of the Secretary of Agriculture and the head of the British Food Mission. It was to effect planned and expeditious utilization of the food resources of the United Nations.

Streamlining For War

Fundamental reorganization of the Department again took place as a result of the Executive Order, dated December 5. At that time the Food Production Administration and the Food Distribution Administration were established. These, with the Agricultural Research Administration, the Commodity Credit Corporation, the Forest Service, the Rural Electrification Administration, and the staff agencies, then constituted the Department.

Naturally the Secretary's wartime powers invested the Department with much more authority and importance than it had ever possessed hitherto. It began to touch the lives of every citizen and to assume a defense and later wartime role of the most critical character. Mr. Wickard's first annual report, submitted on November 1, 1941, was prefaced by a "postscript" announcing the Japanese attack on Pearl Harbor and our precipitation into World War II.

Gradually we began to produce what was needed for defense and war purposes, when needed, and in the quantity required. Farmers rose to new heights of efficiency each production year, the Department acting as over-all staff counselor and adviser. The Department became active in the fields of labor supply, plant site location, and transportation problems, and rendered assistance to farmers in procuring supplies and equipment, priorities and allocations.

A special far-reaching nutrition program was undertaken in foreknowledge that all our people must be reasonably well fed to meet the forthcoming emergency, and that we must also produce much food for our potential and probable allies. The war-time job of the Agricultural Adjustment Administration became greater than ever before. The year's production was outstandingly favorable and we entered the war far better fortified than we would have been had no national farm program existed.

Through the State and County War Boards the Department gave farmers technical aid, made arrangements about price supports and money payments, and generally

assisted them to fulfill their goal pledges. Every agency in the Department did its utmost to assist the Food for Freedom Program. Food conservation was stressed and scarce farm foods began to be allocated to specific needs. A research food-dehydration project soon showed the way to save cargo space and get more actual food value abroad more rapidly than ever.

WAR FOOD ADMINISTRATION

For war purposes the program agencies of the Department of Agriculture were grouped into two administrative units, each headed by an official appointed by and directly responsible to the President. The agencies in the War Food Administration were responsible to the War Food Administrator. The Agricultural Research Administration, Farm Credit Administration, Rural Electrification Administration, and Forest Service were responsible to the Secretary of Agriculture.

On April 30, 1943, the War Food Administration announced an organization to administer the farm labor program. The Director of the Extension Service became responsible for mobilizing farm labor for use within each State, and for the placing of all workers needed on farms to meet local labor needs.

An Office of Materials and Facilities, to aid farmers with their procurement problems, was established May 10, 1943, by War Food Administrator's Memorandum No. 4. The War Meat Board was established May 15, 1943, to facilitate the handling of the Nation's meat supply.

A Director of Transportation was appointed May 26, 1943. On August 25, 1943, the War Food Administration announced the establishment, effective September 1, of a National War Board.

The following changes in names of some old-line Department bureaus should also be mentioned. In February 1943, certain organizational and structural shifts were

made in the bureaus comprising the Agricultural Research Administration in the course of which the Bureau of Home Economics with the addition of the Division of Protein and Nutrition Research, formerly of the Bureau of Agricultural Chemistry and Engineering, became the Bureau of Human Nutrition and Home Economics; the Bureau of Agricultural Chemistry and Engineering became the Bureau of Agricultural and Industrial Chemistry, with the four Regional Research Laboratories now comprising most of it; and the Bureau of Plant Industry became the Bureau of Plant Industry, Soils and Agricultural Engineering.

Greater and Greater Food Production

During 1943 farm food production, as well as farm production generally, again set a record. The Department and the War Food Administration regarded food as a munition of war.

A new farm production record was set for 1943 and new goals were developed for 1944. The price stabilization problem occupied much attention. The Commodity Credit Corporation greatly expanded its operations in response to wartime emergency needs. Government food procurement was stepped up enormously and rationing was applied to a number of foods.

Peace and the World View

The world viewpoint assumed by the Department is significant of the way in which science had shrunk distances. Agriculture now had to be considered, not only in relation to domestic industry, but in the light of world finance and the plans of the United Nations as well. The world organizations of agriculture came into the picture with the meeting of the United Nations Food and Agriculture Conference,

at Hot Springs, Va. in May and June 1943. the constitution for the Food and Agriculture Organization was already being proposed.

During the war many new discoveries and ideas, ranging all the way from the natural to the social sciences, which had resulted from research, but were restrained from full utilization by the long depression, came into their own and could be used at top efficiency. Among these were better varieties of plants and animals, better protection from insect pests and plant and animal diseases, expanding mechanization, improved cultural and fertilizing methods, increased storage of fertility in the soil by the widespread use of conservation measures, the farm security device of supervised loans which gave borrowers funds and expert advice together in one package, and the use of price incentives and other economic devices to get the needed crops at the right time.

But, as peace approached, War Food Administrator Jones saw the need for reorganization and reconsolidation, and he resigned and returned to the bench that this might take place. Secretary Wickard at the same time became head of the Rural Electrification Administration.

On July 1, 1945, Clinton P. Anderson took office as Secretary, to have charge of both the Department of Agriculture and the War Food Administration, and to consolidate and organize them as he thought best. He regarded himself as primarily a businessman rather than a farmer, though he grew up on a farm, and also operated 800 acres of irrigated land in New Mexico as a dairy enterprise. In addition, he retained direction of the home farm of 640 acres, near Mitchell, S. Dak. At the time of his appointment he was a member of the U. S. House of Representatives, serving his third term, and had been chairman of a committee investigating food shortages. Born at Centerville, S. Dak., he was educated at Dakota Wesleyan and at Michigan universities. The first job facing him was departmental reorganization.

On June 29, 1945, the President, by Executive Order No. 9577, provided for the abolition of the War Food Administration and for the transfer of its functions to

the Department of Agriculture. In Memorandum No. 1106, July 3, 1945, the Secretary announced the appointment of a Committee on Reorganization, Milton S. Eisenhower, chairman. Its duty was to confer with all agency heads, and so to intergrate the War Food Administration and the Department of Agriculture as to avoid overlapping, duplication, and inefficiency in service to the public. Secretary's Memorandum No. 1118, August 18, 1945, announced the establishment of a Production and Marketing Administration which was, in effect, a consolidation of many agencies.

Famine Overseas and Its Relief

The President's 9-point Famine Relief Program was announced February 6, 1946, and the Department immediately began to take steps to launch it. Review of the Department's food programs was ordered February 15 and revision of 1946 farm-production goals on February 21.

The Famine Emergency Committee, after an all-day session at the Department, announced on March 11, its specific recommendations for the conservation of wheat, wheat products, and food fats and oils.

On April 9, a report by Herbert Hoover to the Famine Emergency Committee on European food needs was released and the next day the Secretary issued a call for world aid in the food fats and oils crisis.

New Legislation

The Research and Marketing Act, which became law August 14, 1946, provided for extension and expansion of Department research programs. The Farmers Home Administration Act became law the same day, abolishing the Farm Security Administration as such, establishing the Farmers Home Administration, and giving it various functions and responsibilities, including some which formerly lodged in the

Farm Credit Administration

In late 1946 an outbreak of foot-and-mouth disease was discovered in the Republic of Mexico and it rapidly spread over that country. Special legislation and the consent of the Mexican Government enabled the United States to cooperate with her nearby neighbor in efforts to stamp out the infection before it reached our livestock. This campaign began in 1947, and ended in 1952.

From the beginning to the end of his administration Secretary Anderson called for practically all-out farm production; this he did regardless of what curtailment plans industry might undertake. He consistently praised the ability, industry, and integrity of the Department's information work and differentiated sharply between it and propaganda. He resigned May 10, 1948, to run for the Senate.

Further Changes

Secretary Anderson was succeeded in office by his own Assistant Secretary, Charles F. Brannan, a native of Denver and graduate from the University of Denver Law School. Mr. Brannan specialized in irrigation and mining cases in private practice until he became an assistant regional attorney for the Resettlement Administration, in 1935. Two years later he became Regional Attorney for the Department's Office of the Solicitor, with headquarters still in Denver.

In 1941, Mr. Brannan became Regional Director of Farm Security Administration for Colorado, Wyoming, and Montana, still in his native city.

In 1944 he was called to Washington to become Assistant Administrator of Farm Security Administration, and was appointed Assistant Secretary of Agriculture two months later. As Vice Chairman of the Department's Program and Policy Committee he had much to do with formulating and carrying out policies, and he presented the Department's long-range agricultural program to Congress, in 1947.

He was succeeded by Secretary Ezra Taft Benson on January 21, 1953.

Benson Takes Office

Secretary Benson is a nationally known farm leader and a member of the Quorum of Twelve Apostles, Church of the Latter Day Saints, Salt Lake City, Utah. He was born at Whitney, Idaho, August 4, 1899, the son of George Taft and Sara (Dunkley) Benson.

He was a student at the Oneida State Academy, Preston, Idaho. His later educational career is as follows: The Utah State Agricultural College, Logan, Utah, 1918-21; B. S. from Brigham Young University, Provo, Utah, 1926; M. S. in agricultural economics, Iowa State College, 1927; graduate study, University of California, 1937-38.

Secretary Benson operated a farm in southern Idaho, 1923-29. In 1921-23 he served as a missionary for the Church of Jesus Christ Latter Day Saints in the British Isles and Europe. In 1929-30 he worked as a county agent for the University of Idaho Agricultural Extension Service at Preston, Idaho. From 1930 to 1938 Secretary Benson was extension economist and marketing specialist, in charge of economics and marketing work for the State of Idaho.

In the period of 1939-41 he served as executive secretary of the National Council of Farmer Cooperatives at Washington, D. C. Since 1943 Secretary Benson has been a member of the executive committee and was chairman of the board of trustees, American Institute of Cooperation at the time of his nomination (now resigned). He has been awarded scholarship, Gamma Sigma Delta, honorary society of agriculture, Iowa State College, and a fellowship at the University of California, Berkeley Calif.

He was a member and later the president of the Boise Stake of the Church of Latter Day Saints, Boise, Idaho, and during his stay in Washington, D. C. he was president of the Washington Stake. In 1946 he was named president of European missions for the Church. He serves on two national Boy Scout committees, is now on the executive committee of the National Boy Scouts of America. He has always

been deeply concerned with 4-H clubs and all youth welfare organizations. He belongs to the American Marketing Association, the Farm Economics Association, the Rotary Club, and Delta Nu fraternity. He has been a frequent contributor to agriculture, cooperative, and religious publications. He received the honorary recognition award from the College of Agriculture, University of Wisconsin, in February 1952.

Realignment Orders

Following Memorandum No. 1320 of January 21, 1953, which set up five groups among the agencies for better administration, Secretary Benson on March 10, 1953 by a supplemental memo to Memorandum No. 1320 announced that he was regrouping the Department's services into six groups with the addition of Foreign Agricultural Service with a Director of Foreign Agricultural Service as its head. Thereby the Office of Foreign Agricultural Relations was discontinued.

"This action," stated the Secretary, "will make possible a closer coordination of related activities. All the regrouped agencies retain their present structure with the exception of the Agricultural Conservation Program. This will be transferred from the Production and Marketing Administration and placed with the Research, Extension, and Land-Use Group. What we intend is a gradual streamlining of the Department's services in the interest of economy and greater efficiency."

The six groups, the agencies in each, and the officials named to head them:

Research, Extension, and Land-Use--Agricultural Conservation Program, Agricultural Research Administration, Bureau of Agricultural Economics, Extension Service, Forest Service, and Soil Conservation Service; with J. Earl Coke, Assistant Secretary, in charge.

Commodity Marketing and Adjustment--Commodity Credit Corporation, Commodity Exchange Authority, Federal Crop Insurance Corporation, Production and Marketing Administration; John H. Davis, President of the CCC as Director.

Foreign Agricultural Service—R. E. Short, Director

Agricultural Credit Services—Farm Credit Administration.

Farmers Homes Administration, and Rural Electrification Administration; Robert L. Farrington, Acting Director.

Departmental Administration—Hearing Examiners, Library, Office of Budget and Finance, Office of Information, Office of Personnel, Office of Plant and Operations; Richard D. Aplin, Director

Office of the Solicitor—Karl D. Loos, Solicitor

Reconstitution Under Reorganization

Secretary's Memorandum dated June 4, 1953, announced that the Reorganization Plan No. 2 of 1953 had become effective at midnight on June 3. It transfers to the Secretary of Agriculture all functions within the Department not now vested in the Secretary, with certain exceptions. The Plan also provides for two additional Assistant Secretaries of Agriculture, an Administrative Assistant Secretary, and authority to the Secretary to make provisions for the performance of his functions, including any functions transferred under the Plan.

Until such time as any different dispositions may be ordered, the Secretary reconstituted the Department as it existed immediately prior to the effective date of Reorganization Plan No. 2, 1953. All agencies were thereby reassigned all functions transferred to the Secretary as they existed immediately prior to the effective date of the Plan. All actions by such agencies and officers taken prior to June 4, 1953 and still in force immediately prior to the effective date of Plan No. 2 are deemed to remain in force unless and until revoked or modified by proper authority.

U. S. DEPARTMENT OF AGRICULTURE

OFFICE OF THE SOLICITOR

R. L. Farrington - Solicitor

DEPARTMENT ADMINISTRATION

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Office of Budget & Finance

Joseph C. Wheeler - Director

Office of Hearing Examiners

Glen J. Gifford - Chief

Office of Information

R. Lyle Webster - Director

Library

Foster E. Mohrhardt - Director

Office of Personnel

MacHenry Schafer - Director

Office of Plant & Operations

Francis R. Mangham - Director

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Executive Ass't
to the Secretary

Robert D. McMillen
Assistant to Secretary

Don Paarlberg
Assistant to Secretary

Thomas J. Flavin
Judicial Officer

Charles Figy
Assistant to Secretary

Frederick W. Babbel
Assistant to Secretary

Ernest C. Betts, Jr.
Assistant to Secretary

EZRA TAFT BENSON
Secretary

TRUE D. MORSE
Under Secretary

MARKETING & FOREIGN

AGRICULTURE

Earl L. Butz

Assistant Secretary

Agricultural Marketing

Service

Orris V. Wells -

Administrator

Foreign Agricultural

Service

William G. Lodwick -

Administrator

Commodity Exchange Authority

Rodger R. Kauffman -

Administrator

FEDERAL-STATES RELATIONS

Ervin L. Peterson

Assistant Secretary

Agricultural Research Service

Byron T. Shaw - Administrator

Forest Service

Richard E. McArdle - Chief

Soil Conservation Service

Donald A. Williams - Administrator

Federal Extension Service

Clarence M. Ferguson -

Administrator

Agricultural Conservation Program

Service - Fred G. Ritchie -

Administrator

Farmer Cooperative Service

Joseph G. Knapp - Administrator

AGRICULTURAL STABILIZATION

James A. McConnell

Assistant Secretary

Commodity Stabilization

Service

Earl M. Hughes -

Administrator

Federal Crop Insurance

Corporation

Charles E. Laidlaw -

Manager

Commodity Credit

Corporation

True D. Morse -

President

AGRICULTURAL CREDIT

Kenneth L.

Scott -

Director

Agricultural

Credit

Services

Farmers Home

Administration

R. B. McLeaish

Administrator

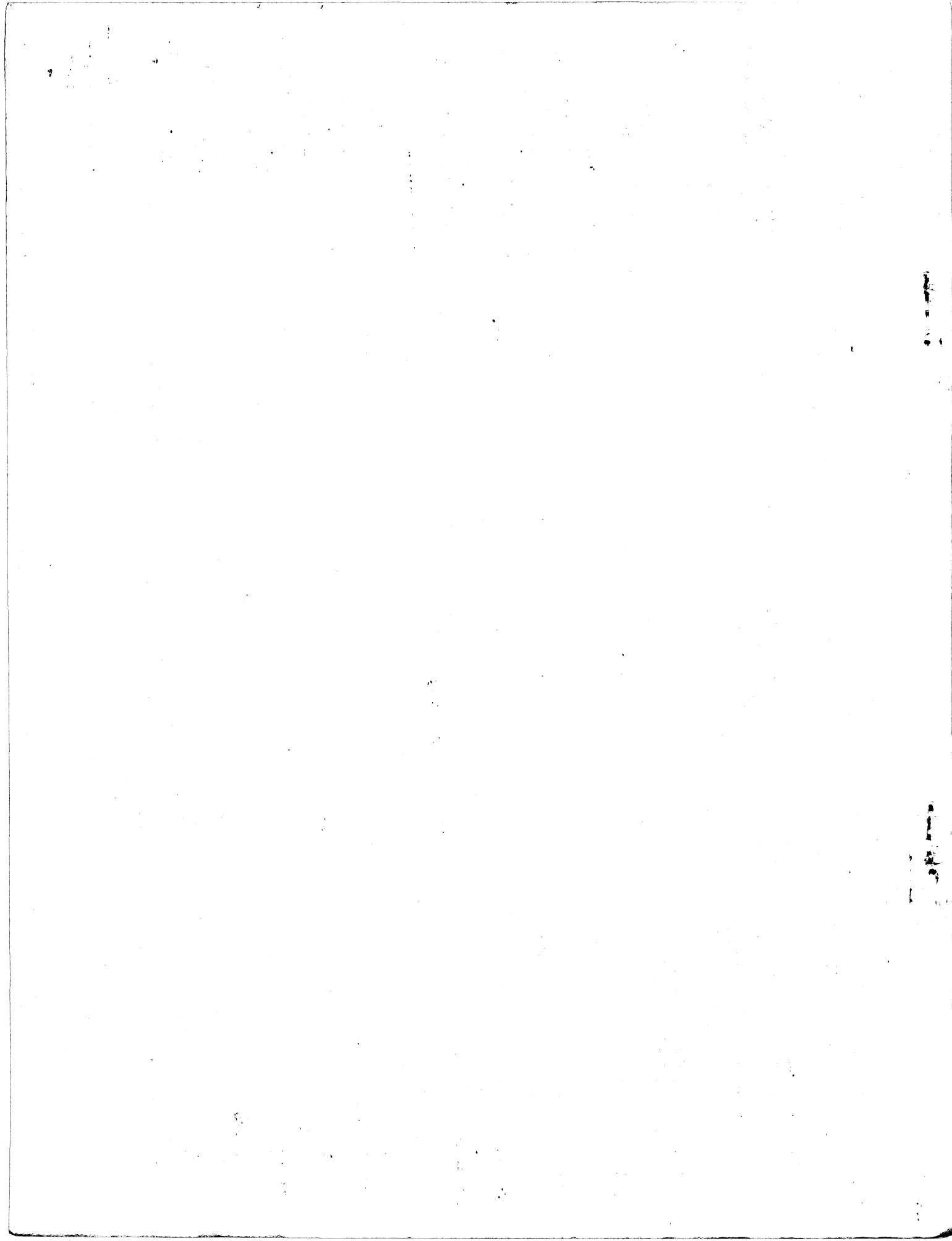
Rural

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Ancher Nelson -

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UNITED STATES DEPARTMENT OF AGRICULTURE
Office of Information

SOME LANDMARKS OF DEPARTMENT OF AGRICULTURE HISTORY

(Condensed Version)

Excerpts herein are based on Agriculture History Series No. 2, as
issued by the Department Committee
on Agricultural History

June 1958

Abridged as USDA Document No. 8

1. The first part of the report

is a general introduction

to the subject of the report

and

the second part

is a detailed description

of the results of the

investigation

2. The second part of the report

is a detailed description

of the results of the

investigation

3. The third part of the report

is a detailed description

of the results of the

investigation

and

the fourth part

is a general introduction

to the subject of the report

and

the fifth part

is a detailed description

of the results of the

investigation

and

the sixth part

is a general introduction

to the subject of the report

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the seventh part

is a detailed description

of the results of the

investigation

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the eighth part

is a general introduction

to the subject of the report

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of the results of the

investigation

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the tenth part

is a general introduction

to the subject of the report

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the eleventh part

is a detailed description

of the results of the

investigation

and

the twelfth part

is a general introduction

to the subject of the report

and

the thirteenth part

is a detailed description

of the results of the

investigation

SOME LANDMARKS IN THE HISTORY OF THE DEPARTMENT OF AGRICULTURE

The United States Department of Agriculture grew directly out of the Patent Office which was established April 10, 1790. During the 1830's the newly reorganized Patent Office, then in the State Department, undertook to distribute seeds and collect agricultural statistics. Out of these activities developed the basis for a separate agency devoted exclusively to the interests of agriculture.

The first Patent Commissioner under this new law, Henry L. Ellsworth (1791-1858), was the son of the third Chief Justice of the United States Supreme Court, Oliver Ellsworth. He was born in Connecticut and graduated from Yale in 1810. Ellsworth practiced law, but he also farmed and was a leader in the Hartford County Agricultural Society. He became president of a large insurance company and was active in business and civic life. He resigned as mayor of Hartford in 1835 to become head of the Patent Office on June 15 of that year.

In his annual reports dated January 1, 1838 and 1840 respectively, he requested funds from congress to be used for collecting and distributing seeds and compiling agricultural statistics.

On May 15, 1862, President Abraham Lincoln signed the bill establishing what is now the United States Department of Agriculture as a separate agency with bureau status headed by a commissioner of its own. On February 9, 1889 the Department was raised to Cabinet rank. Its supervising officer automatically became the Secretary of Agriculture.

At no time in its history could an observer survey the Department and show that it had sprung full-grown from the brow of the bureaucrat. A study of the Department's development reveals instead that its work was expanded by Congressional authorization at successive periods of the country's history, often because different groups of citizens demanded that something be done in the field of agriculture.

Emergencies, like those created by the rapid rise of technology, widespread animal or plant ills, insect infestations, dust storms, droughts, floods, the exploitation of forests, the necessity for better communication, or economic depressions compel the Government to take action in new fields.

There is nothing new about public aid to agriculture. For the farmer always battled the elements on a precarious basis, and far back in world history, before commercial farming became a reality, government had to aid him every now and then, if only to guarantee the food supply.

Organization and Study Lead to Changes

One of the first signs of the change in American agriculture was the establishment of agricultural and scientific societies by the so-called "gentlemen farmers." The Philadelphia Society for the Promotion of Agriculture was founded in 1785, and George Washington was elected an honorary member on July 4 that year. Washington consistently manifested great interest in agriculture and was often affectionately called "The Farmer of Mt. Vernon."

The suggestions made by Washington were favorably received by his Secretary of State and public men generally. So a committee of the House of Representatives recommended on January 11, 1797, that an agricultural board or society be created, that high Government officials be members ex-officio, and that it meet annually. The measure never came to a vote.

In 1819 the Secretary of the Treasury directed consuls to collect seeds, plants, and agricultural inventions for introduction into this country, although there was no appropriation for the purpose.

The agricultural societies were a chief means by which improvements were brought to the notice of farmers. In 1852 there were 300 active agricultural organizations, and by 1860 they numbered over a thousand. Closely related to

their spread was the rise of agricultural fairs and journals. Elkanah Watson held his first real agricultural fair in Pittsfield, Mass., on October 10, 1810, with 26 farmers participating. He then organized the Berkshire Agricultural Society to hold annual fairs, and thereafter fairs rapidly became institutionalized.

"The Agricultural Museum," believed to be the first farm journal in the country, was published in Georgetown, D. C., from 1810 to 1812 as the organ of the Columbian Society. Far more significant in its influence, however, was the "American Farmer" established at Baltimore in 1819 by John Skinner. Farm journals multiplied thereafter, appearing in every State, and all urged farmers to take up new and better methods of husbandry.

Congress also became aware of agriculture in this period, the House establishing a Committee on Agriculture in 1820 and the Senate one in 1825. In addition Congress in 1828 authorized the publication of a manual, prepared by Richard Rush, Secretary of the Treasury. It contained the best available information on the growth and manufacture of silk.

The development of the reaper, the steel plow, the threshing machine, and other implements around this time eventually produced great changes in agricultural technology and in the general economic and social organization as well. The farmer's investment in these machines made it essential for him to increase his income. Thus his dependence on the commercial market increased.

At the instance of Patent Commissioner Henry L. Ellsworth, President Van Buren in recommending that Congress widen the scope of the Sixth Census, induced that body on March 3, 1839 to permit the Patent Office to expend \$1,000 for the collection of agricultural statistics and for other agricultural purposes. It was natural in these early days that such work gravitate toward the Patent Office, for it was concerned with experimentation and the stimulation of enterprise and invention, and therefore with scientific progress in agriculture.

Governmental aid to agriculture was at last under way. The aid would progress from the increase to the ~~regulation~~ of production; from subsistence to commercial agriculture; from self-reliance to considerable dependence on guidance by the Government; from the exploitation to the conservation of natural resources; from traditional guesswork to the application of practical scientific knowledge; from uncoordinated individual activity to well-coordinated group action through governmental aid, using the democratic process.

Every successive new function undertaken by the Department of Agriculture will be found outlined in an act of Congress. Hence the expression "The Department of Agriculture did so and so" could be interpreted as an abbreviated way of saying, "The Department of Agriculture, responding to public demand through the execution of work directed by an appropriate act of Congress authorizing this activity, did so and so."

Social and Economic Questions Attacked

At the turn of the century another group of problems appeared. They concerned social and economic questions associated with our decreasing farm exports and the ever-increasing use of agricultural technology. The farmer now needed assistance in his credit and marketing problems as well as in the formation and management of cooperatives. He required adult education in agricultural science which was provided by demonstration farms and later by the Extension Service.

World War I was a period of accelerated exports to Europe, speculative land values, greatly increased acreage in cultivation, and expanded use of Agricultural technology, with a great decrease in the number of horses and mules on farms. Thus millions of acres that had never been cultivated before were plowed up, while millions of other acres formerly used to pasture and grow feed for work animals became available for beef and dairy-herd production.

Return to Earlier Century

On July 4, 1836 when the Patent Office had become a separate bureau of the Government, it occupied rooms in Blodgett's Hotel, a three-story building on E. Street, Northwest. In December of 1836 this building burned to the ground and all the patent records along with it. Only in 1840 did the Patent Office get its new building on F. Street, Northwest, now occupied by the headquarters of the Civil Service Commission.

During 1836 and 1837 Ellsworth, at his own expense and without Congressional authorization, had distributed seeds and plants that he received gratuitously for the purpose. Soon the function of seed distribution was to be regularized under Congressional authority. For a long time it consumed most of the Federal funds allocated to agriculture. Ultimately it became almost a disgrace, as certain heads of the Department declared. Congressional seed distribution was not ended finally until June 30, 1923.

Ellsworth felt there was great room for expanding research by selection among wheat varieties, some of which yielded as much as 20 percent more than others. He reported experiments carried on during the preceding summer which had indicated that the Indian corn crop could be improved in yield one-third simply by due regard for seed selection.

Ellsworth's account for 1839 occupied but two printed pages. Herein he remarked that: "The ordinary expenses of the Patent Office the past year, including payments for the library and agricultural statistics, were \$20,799.95."

Congress exhausted itself by its 1839 appropriation, and no grant was made for agricultural purposes in 1840 or in 1841. In 1842 another \$1,000 was made available and this sum was doubled in both 1843 and 1844. It rose to \$3,000 in 1845, but nothing was granted in 1846 and agricultural work was interrupted. There were no lapses thereafter, however.

Commissioner Ellsworth's Reports are of special interest both because of his lively intelligence and of his urgent desire to aid agriculture. His last one, dated January 28, 1845 (he relinquished office on April 30 of that year,) covered activities during 1844 and comprised a book of 520 pages with index. The Commissioner began by citing the low rates of pay in his office.

The Commissioner also mentioned the "electric fluid" again which was now achieving all sorts of things since it had been "confined and tamed." The telegraph annihilated distance. "Paper H" in the book detailed how Professor Page had telegraphed 40 miles. Elsewhere was published a letter from Professor Morse to the Secretary of the Treasury reporting upon the telegraphic transmission of the proceedings at the Democratic National Convention in Baltimore during May 1844. Morse also suggested that the Government take over this new medium of communication and operate it as it did the postal service.

Agriculture Now a Major Study

The science of agriculture had now become a major study in the Patent Office. Abandoned and worn-out lands were being reclaimed. Guesswork and hereditary notions were yielding to scientific analysis and the application of scientific principles. Science however must always persevere. Some scientists had at first claimed that cornstalk sugar was grape sugar, whereas additional tests had proved it to be "equal to the best muscovado sugar." Ellsworth felt sure that good sugar would soon be produced by this method on a large scale. It never was.

Edmund Burke became Commissioner of Patents May 4, 1845 and held office till April 30, 1849. During his term the "Report" was greatly expanded and included tables of British and American imports and exports as well as English cotton quotations. In 1846 agricultural statistics were omitted for lack of an appropriation, but in 1847 they reappeared. In 1849 the Patent Office was placed in the

new Department of the Interior. In December 1849, President Zachery Taylor recommended the establishment of a Bureau of Agriculture in the new Department. His message declared that Governmental assistance to agriculture was totally inadequate. Congress took no action.

Thomas Ewbank (1792-1870.) reporting for 1849, addressed himself to President Millard Fillmore. Ewbank served as Patent Commissioner from May 19, 1849 until November 8, 1852. Born in Durham, England, he began as an apprentice in the sheet-metal trade. He came to this country in 1819 and was thereafter an inventor, manufacturer, and author. His primary interest was the industrial application of chemistry and physics.

At the direction of the Secretary of the Interior a "practical and scientific agriculturist" was hired to attend agricultural matters in the Patent Office and to prepare the separate agricultural "Report." Daniel Lee, M. D., was appointed. Ewbank omitted agricultural statistics from the volume because he said those hitherto published had been unreliable, and he therefore declined to "waste time and paper in printing crude guesses." He said that Congress or the State legislators should devise methods of getting good statistics worth printing.

Under date of February 28, 1853 Daniel Lee wrote on agricultural progress during the year, his main concern still being the conservation of our natural soil resources. He again accused the cities of seducing farmers into sending them their soil riches in the form of foods and breadstuffs. He said that no generation had the right to destroy the soil, a sentiment echoed by a few other far-sighted men many years afterwards.

Lee also insisted that we should have agricultural schools to teach our young the principles of soil-building science. He urged Congress to take action. It was about 1849 that Jonathan Turner of Illinois began his campaign for industrial universities. This was part of the long struggle for popular and agricultural education which finally culminated in the passage of the Land-Grant College Act of 1862.

Continued Flow of Patent Office Reports

Silas H. Hodges, who acted as Patent Commissioner from November 8, 1852 to March 25, 1853, apologized for the inferior character of Lee's agricultural Report that year. R. C. Weightman was Acting Commissioner from March 25 to May 15, 1853. On the next day Charles Mason became Commissioner, and he held office till August 4, 1857. He made Daniel Jay Browne the editor of agricultural reports and specified that statistics were to be omitted until reliable ones were collected.

Charles Mason (1804-82) was born in New York, attended West Point, and then turned to law and journalism. He became Chief Justice of the Supreme Court of Iowa Territory. After his retirement as Patent Commissioner he was a patent lawyer in Washington, D. C. but subsequently entered politics in Iowa. The Reports during his term of office contained fewer letters from correspondents and more learned essays of substantial character by writers like Joseph Henry and other distinguished men.

Samuel T. Shugert was in charge of the Patent Office until Joseph Holt (1807-94) became Commissioner, September 10, 1857 to March 14, 1859. Holt, a rather remarkable man was born in Kentucky. Buchanan appointed him Patent Commissioner for his aid in a great Democratic victory. He became Postmaster General of the United States in 1859 and was later the first Judge Advocate General and had much to do with the development of our military law and the supervision of court martial.

At this time various groups were agitating for agricultural colleges, free land, and more Federal aid for farmers. If Congress would not appropriate money for the colleges at least it should make provision for them in the form of public-land grants. Both movements hit upon the consistent opposition of the southern delegation to Congress which sincerely believed that the doctrine of States rights forbade any such Federal aids. One land-grant college bill did get through Congress during Buchanan's administration, but the President vetoed it because he thought that Federal grants to States were not only extravagant but unconstitutional.

William Darius Bishop (1827-1904,) born in New Jersey, and a former railroad official and member of Congress, was made Commissioner of Patents by President Buchanan March 23, 1859 and served until February 15, 1860, when he went back to railroading and politics. He was followed in office the next day by Philip F. Thomas. Thomas resigned December 13, 1860 without issuing a Report. The 1860 publication was edited by the "Superintendent of the Agricultural Division," Thomas G. Clemson, and from December 14, 1860 to March 28, 1861, S. T. Shugert was again Acting Commissioner.

It was maintained that the United States now needed much more than a mere Agricultural Division in the Patent Office. It now spent \$53,000 a year, had a superintendent, four clerks (including translators and writers,) a curator or gardener, and some aides for the latter.

Increased Recognition Urged

The Report for 1861 was issued in 1862 by the new Commissioner of Patents, David P. Holloway. It was the most complete agricultural manual so far issued by the Patent Office, but it contained no statistics other than a few on milk production. It consisted in the main of essays on the current progress of American Agriculture. There was less material extracted from journals, newspapers, and books. Holloway was appointed March 28, 1861 and served till August 16, 1865, after agriculture had left the Patent Office.

Holloway launched a prolonged and fervent plea for the establishment of an institution to serve agriculture in this country where three-fourths of the citizens were still farmers. He undoubtedly reflected a rising tide of public opinion or he would not have written as he did.

The United States Agricultural Society had been organized in 1852, and it ultimately became the most powerful force urging the establishment of a Federal

Department of Agriculture. A National Convention of Agriculturalists was called to meet in Washington June 24-25, 1852, and the agricultural society was formed as a result. A hundred and fifty delegates were present and Marshall P. Wilder was elected the society's president.

The organization rapidly drew into its membership the leading farmers of the Nation, and its journal was highly regarded and powerful. From the outset it urgently sought public assistance for farmers, and at each meeting it urged the establishment of a Department of Agriculture with a Cabinet officer at its head.

The United States Agricultural Society kept up continual pressure, especially through Charles B. Calvert of Maryland, its member, who was elected to Congress July 4, 1861 and placed on the Committee on Agriculture. Calvert worked for a department, not a bureau, though there was much hostility toward the idea of another Cabinet office being established. It was at one time suggested that the head of the department be elected by the farmers. Meanwhile Morrill was making headway on his land-grant college bill.

In 1859 an Advisory Board of Agriculturist met at the request of the House Committee on Agriculture and after discussion made a report recommending the creation of a Department of Agriculture with a Cabinet officer at its head. This report was suppressed though its main recommendation became known.

Should the new agency be a department or merely a bureau as Lincoln had suggested? Ultimately the House Committee on Agriculture decided in favor of a department in charge of a commissioner, and in such form the bill was finally enacted. It was felt that commercial and manufacturing interests were local in nature so they were omitted from consideration. It was stated they could easily combine among themselves and make their wants felt by the Government, while "Agriculture clad in homespun is very apt to be elbowed aside by capital."

Far-Reaching Agricultural Legislation Enacted in 1862

The fact that the Southern delegation no longer sat in Congress naturally facilitated the passage of the bill, because their passion for States rights might well have defeated it. President Lincoln signed the bill May 15, 1862 and it became law. On May 20, he signed the Homestead Act which made provision for apportioning freehold farms of 160 acres each from the public domain to citizens who would make homes on them and till them for 5 years. Then on July 2, 1862 Lincoln approved the Land-Grant College Act fathered by Senator Justin Smith Morrill of Vermont.

The last-named law endowed the colleges with 11,000,000 acres of public land, nearly twice the area of Vermont. The States were authorized to sell the land and use the proceeds to endow their respective agricultural colleges. The States were thereafter to operate the colleges themselves. The law is important constitutionally as marking a beginning of Federal grants-in-aid to the States.

Meanwhile the Department of Agriculture had its origin in the office of Commissioner of Patents Holloway, July 1, 1862, and Isaac Newton (1800-1867,) who since early 1861 had been in charge of the Agricultural Division, became the first Commissioner of Agriculture. It is of interest to observe that public farm aid was not a nationally pulse-quickenning subject in those days, and in the main the gentleman farmers led the agitation for the establishment of the Department.

There was considerable political inertia on the subject, and rural America largely held to the Jeffersonian maxim that the best was the least government. Senator Hale in discussing the proposed department in fact said that the prevailing farmer attitude was: "For Gos's sake let us alone!" There was no compact farm bloc, and professional consultants were not in agreement as to procedure.

The Department had mainly concerned itself with distributing seed, and largely lost the respect of agricultural scientists and journals. It did not appeal to

the actual soil cultivator or dirt farmer for many years. The Nation made no effort for sound land settlement or to control land speculation and exploitation. As a matter of fact no controls were lodged in the new Department. Food was needed for the Civil War, so an unnatural extension of farm-crop belts took place and new machinery was widely utilized. Economists of the day took the farmer for granted or ignored him.

The act establishing the Department of Agriculture in its preamble reads thus:

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, - That there is hereby established at the seat of Government of the United States a Department of Agriculture, the general designs and duties of which shall be to acquire and to diffuse among the people of the United States useful information on subjects connected with agriculture in the most general and comprehensive sense of that word, and to procure, propagate, and distribute among the people new and valuable seeds and plants.

The original act offers no evidence that any balanced social and economic program for agriculture was desired or much less visualized, at the time. Yet the law was very broad in scope. It gave the Department great latitude and discretion. Meanwhile it would appear that the Department has had ample legal authority for most of its subsequent activities. It is also of interest that the act prescribed the appointment of professionally qualified employees.

Isaac Newton, the first Commissioner of Agriculture, was born in New Jersey but grew up in Pennsylvania. He served from July 1, 1862 until his death in office on June 19, 1867. He was a Quaker of farmer stock and limited formal education. When he grew to maturity he managed two large farms in Delaware County, Pennsylvania, so well that they became celebrated as models. He became an active member of the Pennsylvania State Agricultural Society. In 1854 he purchased a thousand acres of land in Prince William County, Virginia, but the outbreak of the Civil War rendered this venture unsuccessful.

Newton was personally acquainted with Lincoln. One story has it that he delivered milk to the White House. Lincoln placed him successively in charge of agricultural work in the Patent Office and in the Department of Agriculture.

Early in 1863 Newton reported for the first time to President Lincoln. He began by quoting and discussing the organic act of his Department. He also reported that between July 1, 1862 and January 1, 1863 he had expended the sum of \$34,342.27, leaving an unexpended balance of his appropriation of \$25,657.73. He asked Congress to grant him \$130,000 for the fiscal year to end June 30, 1864, "which is deemed a low estimate."

Objectives of Department Take Shape

The earliest bound volume of Department of Agriculture publications now in the Department Library begins with a circular from the Commissioner himself on the "Present Agricultural, Mineral, and Manufacturing Condition and Resources of the United States," dated 1862. Next there is a "Catalogue of the Plants, Bulbs, Tubers, for Distribution from the U. S. Propagating Garden," with a report on the "Objects and Aims of the Garden" by its superintendent, William Saunders, dated the same year. Then follows the "Report on the Chemical Analysis of Grapes," by Chemist Charles M. Wetherill, who concluded that our wine grapes were as good as those of Europe. The Commissioner's report for 1863 contained meteorological data supplied by Joseph Henry of the Smithsonian Institution.

Newton mentioned buildings, but not until 1867 did Congress appropriate \$100,000 for building at 12th and B. Streets, Southwest. A stable was erected in 1879, and \$25,000 was appropriated to put up a building for the Seeds Division and the Division of Statistics in 1881. A green-house was erected in 1883,— no more new buildings until 1897.

The Commissioner recommended the founding of a library. One had been

started in the Patent Office in 1840 when a clerk was appointed to gather statistics and useful agricultural material. In 1869 the Department got these books and added them to its own inadequate library. This occupied the entire west end of the first floor of the new Department building. J. B. Russell, the first librarian, was appointed in 1871.

Jacob R. Dodge, who was appointed statistician in 1866, was distinguished in his specialty, and served the Department well for 24 years. Statistics were long regarded as almost a divine revelation and as constituting the physics and physiology of society. Investors and speculators spent huge sums to obtain figures from which to predict market fluctuations. They thought that reliable crop information would set the farmer right up in the world; and that he could foil speculators by withholding his crops from market till the right time. It was a beautiful theory but did not work, partly because too few farmers fully understood the implications of the statistics provided for them.

During the war there had been an era of prosperity in some areas. The Corn Belt had begun to be stabilized in the present area. Wisconsin and Illinois were still the chief wheat-producing States, but the Wheat Belt began to move westward, away from the exhausted lands of the Southeast.

On November 27, 1865 Commissioner Newton reported to President Johnson for 1865. It was a time for world expansion. Some departmental scientists had been sent to Europe and Asia to make observations, and they traveled very economically. In fact Townsend Glover had attended the entomological exhibit in Paris at a cost of only \$500.

Chief Clerk John W. Stokes was Acting Commissioner from June 20, 1866 until December 4, 1867 when Horace Capron (1804-85) was appointed Commissioner. Capron was born in Massachusetts, but grew up in New York. In 1836 he erected a cotton mill at Laurel, Maryland, which he later made into a model factory. Upon his resignation as Commissioner June 27, 1871 he went abroad to become agricultural

adviser to the Japanese Government.

Commissioner Capron manifested considerable interest in steam plowing and reported 3,000 steam plows at work in England and only 2 in the United States. Later in the book appeared a 10-page article on the "History of American Inventions for Cultivation by Steam." It was written by a patent examiner and well illustrated. The new Commissioner said he had reorganized the Department, making drastic changes,. At this time, January 13, 1868, the Department had about 47 employees.

In 1868 Commissioner Capron could report to President Johnson that the new building was at last completed. It was of Renaissance architecture, 3 stories high, and 170 by 61 feet. Its steam-heating apparatus was reported to be in successful operation. Including furniture and laboratory equipment it had cost \$140,420. Reporting to President Grant for 1870 Commissioner Capron again protested the insufficient remuneration of his staff and asked much larger appropriations. He reported expenditures of \$169,175.24.

President Grant appointed Frederick Watts (1801-89) to succeed General Capron, and he took office August 1, 1871. Watts was born in Pennsylvania of Welsh extraction. He grew up on a farm and acquired a taste for and interest in farming. He studied law and was president of the Cumberland Valley Railroad Company from 1845 to 1871, but he had meanwhile engaged in scientific farming. Watts had experimented with various types of farm buildings and had organized farm societies. He was the first head of the Department to give attention to our timber supply. His reports are dated from 1871 to 1876.

Watts appointed the statistician, J. R. Dodge, to serve also as editor and the latter complained that it was very difficult to get properly qualified persons to compile and edit agricultural reports. The compensation, \$1,200 to \$1,800 a year, was insufficient to attract workers with broad agricultural experience and high literary attainments.

In 1872 the Department had an appropriation of \$197,070 of which all but

\$1,278.82 was expended, but that was said to be sufficient to cover outstanding bills and still leave a small margin for return to the Treasury. In 1873 the Commissioner spoke of the increasing importance of entomology, and noted the cost and extent of insect damage.

Chemist William McMurtrie, was devoting his time to agricultural products. Watts had been annoyed by private individuals who wanted the departmental chemist to test wine, patent medicines, and mine samples for them, and even to give them certificates of merit. Since there had been loud complaints about frauds in commercial fertilizers the chemist was told to analyze some of them and publish the results.

In 1872 when James M. Swank wrote his brief account of the Department's history and development, J. R. Dodge was statistician, William Saunders the superintendent of gardens, Townsend Glover entomologist, Ryland T. Brown chemist, George Vasey botanist, J. R. Russell librarian, and Andrew Glass superintendent of the seed room. The Department had 50 clerks and specialists and 50 messengers, laborers, and other employees.

President Hayes appointed William G. LeDuc (1823-1917) Commissioner of Agriculture on July 1, 1877. The latter was born in Ohio, the son of a French father who had come to the United States to help the colonists in the Revolutionary War. LeDuc had studied law, been admitted to the bar, and had become active in and around St. Paul in the development of the farm country. He served in the Union army and later entered railroading. As Commissioner he established a tea farm and was greatly interested in sugar beets, sorghum, and animal diseases, the last interest culminating in the Bureau of Animal Industry.

Commissioner LeDuc's first Annual Report was for 1877. In it he presented a table to show that the Department of Agriculture received small appropriations as compared with other Federal Government agencies.

In 1879 a Veterinary Division was established to carry out fully the work on animal diseases. Congress had also appropriated \$10,000 for study of the history

and habits of insects. Veterinarians contributed long articles on animal diseases in this 1879 volume. The last report submitted by LeDuc was that for 1880..

LeDuc also wrote that the departmental employees received lower pay than those doing similar work in other Departments. His distinguished chemist received only \$2,000 a year (when he got it) for his "laborious and valuable" services, whereas a chemist who worked a short while detecting fraud in sugar for the Treasury Department received four times that much.

Dr. George B. Loring (1817-91,) of Massachusetts, educated as a physician, but also a scientific farmer and a Victorian-type political orator, was appointed Commissioner of Agriculture by President Garfield, July 1, 1881. Loring had operated a stock farm and had done much to further agriculture throughout his life.

Loring's first volume bears the dates 1881 and 1882. D. E. Salmon, later to be first chief of the Bureau of Animal Industry, and already a distinguished scientist, was in charge of the Veterinary Division. Reports were printed by several veterinarians regarding contagious pleuropneumonia, and agitation was rife for Federal action.

Organization and Growth in 1883 and After

In 1883 the Department consisted of the Division of Gardens and Grounds; the Botanical Division; the Microscopic Division; the Chemical Division; the Entomological Division; the Division of Statistics; the Veterinary Division; the Forestry Division; and the Seed Division.

Not many years later Theobald Smith, F. L. Kilborne, and Cooper Curtice solved the cattle-tick fever puzzle in the Bureau of Animal Industry by proving that the tick was the transmitting agent. This was a fundamental medical discovery of far-reaching importance.

The first report of the Bureau of Animal Industry was in the main devoted to

contagious pleuropneumonia and cattle-tick or southern cattle fever. The bill creating the Bureau was introduced by William H. Hatch of Missouri. Its passage marked a notable extension in the interpretation of the general-welfare clause of the Constitution. Here was a problem that actually transcended the capacities of the States, and individual freedom had to be restricted by the Federal Government for the public welfare.

The Bureau stamped out contagious pleuropneumonia in 5 years, a world record for its control and a tremendous boon for livestock men. The Bureau thereafter performed a long line of outstanding scientific research on hog cholera, hookworm, bovine tuberculosis, anthrax, blackleg, cattle-tick fever, contagious abortion, and many other animal and fowl diseases.

We come now to the last Commissioner of Agriculture who was also the first Secretary of Agriculture, Norman J. Colman (1827-1911) of Missouri. He was appointed by President Cleveland to take office April 3, 1885, and his first Report is dated that year. Colman was born in New York; taught school, studied law, and fought in the Civil War. After the war he started "Colman's Rural World" in St. Louis. He was elected to the Missouri State legislature and manifested much interest in the State university and served in many agricultural organizations

Colman was appointed because of his broad knowledge of agricultural problems and was almost certainly the most competent head the Department had up to that time. He was largely instrumental in effecting the passage of the Hatch Act which founded the State agricultural experiment stations and gave the Department its second Bureau, the Office of Experiment Stations.

Largely through Colman's interest a meeting was held in 1883 to consider the establishment of State experiment stations with Federal aid and a permanent organization was effected at the third meeting in 1887 - the Association of American Agricultural Colleges and Experiment Stations. The agricultural societies, especially the Grange and similar agencies, clamored for action. On March 2, 1887 the Hatch Bill was passed establishing the first national system of agricultural

experiment stations in the world and setting up the Office of Experiment Stations in the Department of Agriculture to coordinate their efforts. This authorization of combined Federal and State work naturally required some departmental reorganization.

W. O. Atwater was made Chief of the Office of Experiment Stations and A. C. True was associated with him.

The Department had received scant praise in its career so far. The farmers could not well apply the knowledge they had received in the form in which they received it. That was a gap which the Extension Service filled a decade or so later. Congress must give the Department scope for educational, economic, and social as well as scientific functions.

Emphatic Agitation for Cabinet Rank

The 50th Congress (December 5, 1887 - March 3, 1889) was simply deluged with petitions and memorials asking that the Department be given Cabinet rank. This was not altogether new agitation; it had gone on periodically for 30 years. Bills had even been introduced and occasionally passed by the House of Representatives to give the Department cabinet rank. Finally the Hatch Bill was passed and signed. Commissioner Colman was nominated and on February 13 confirmed as the first Secretary of Agriculture. The sources of lawmaking are very clear in this instance. Congress created the Department of Agriculture because of the hard effort, ceaseless agitation, and widespread expression of views by those who favored such legislation.

Colman left office with Cleveland. The incoming President Harrison appointed Jeremiah M. Rusk (1830-93) and he assumed office on March 7, 1889. Rusk had been born on a farm in Ohio, but in 1853 he went to Wisconsin to keep a tavern. This venture was a success so he started a stage line which was also profitable, and in time he became Governor of Wisconsin. His period as Secretary of Agriculture was

marked by the eradication of destructive cattle diseases, and the passage of legislation for the inspection of meat. Rusk's particular contribution was his recognition of the importance of publicity and his ability to engage the interest of the press in departmental activities.

Secretary Rusk promptly reorganized the Department. He retained direction of the executive work himself and placed the scientific work under the first Assistant Secretary provided by Congress, who was Edwin Willets. He set up a Division of Records and Editing and urged the frequent publication of the results of scientific work in clear language that practical farmers could readily understand. The publication of Farmers' Bulletins therefore began. Rusk also began a systematic investigation of foreign markets for American farm products. He indicated that our farm exports were not so profitable as they once were.

The Department of Agriculture consisted of the following branches in 1889: Division of Statistics; Division of Entomology; Division of Chemistry; Section of Silk Culture; Botanical Division; Section of Vegetable Pathology; Division of Economic Ornithology and Mannalogy; Division of Microscopy; Office of Experiment Stations; Forestry Division; Division of Gardens, Grounds, and Horticulture; Seed Division Division of Pomology; Folding Room Library; Museum; Bureau of Animal Industry.

In 1891 the Weather Bureau became the Department's third unit of bureau status. It had been transferred from the War Department, because the public considered the civilian control would make it more useful to agriculture and commerce. Since the Department had long carried on meteorological work the transfer was appropriate.

Cleveland, returning to the Presidency, appointed J. Sterling Morton (1832-1902) Secretary of Agriculture. He assumed his post March 7, 1893. He was born in New York and enjoyed the "distinction" of having been expelled from the University of Michigan for his independence. He had located in Nebraska City where he became a politician and editor of a newspaper. Morton had long been a student of agriculture, and had owned and worked a Nebraska quarter-section. He had a passion for

tree planting and became the founder of Arbor Day. As Secretary he emphasized economy and so objected to free seed distribution that he actually put a stop to it at one time.

Reporting for 1893, the secretary advocated better departmental organization and gave some information about foreign agricultural departments. He said that the classified civil service was defective because there was too much injustice in rank and pay. Secretary Morton commented that the act creating the Department had provided it with no building. The main structure erected in 1867 to accomodate 50 people in 4 divisions was now far too small.

The formation of the Dairy Division and its initial operation were described in Morton's 1895 Report. Henry E. Alvord was its first chief. Civil Service status had been extended to the Department's 2,019 employees by Presidential order dated May 24, 1895, which included all of them except the Presidential employees and common laborers. The Department now had 429 female employees.

In his final statement, that for 1896, Morton recorded that the Department's annual appropriation was \$2,583,750.

The Secretary consistently operated the Department economically and turned money back to the Treasury. He was very hostile to seed distribution and insisted it be abolished, and had actually tried to stop seed distribution by injunction. Seeds to the amount of two million dollars in retail ^{value} had been sent out in competition with those sold by retail seedsmen. Later the seedsmen were given the business of making the distribution themselves which nullified them.

The Secretary gave the average age of the chief of his scientific bureaus as 42 years and 3 months, the oldest being 51 and the youngest 29. He said that their salaries of \$2,500 and the \$1,800 paid their first assistants were insufficient. Even the directors of the State experiment stations received more. Turn-over was high because the scientific staff was underpaid..

At this point Secretary Morton left office and James Wilson of Iowa was appointed his successor by President McKinley, taking office March 7, 1897.

Secretary Wilson (1836-1920) was born in Ayrshire, Scotland; he came to the United States in 1851 and chose farming as his life work. He early became a community leader in Tama County, Iowa, was elected to the legislature, and also served three terms in Congress. In 1891 he was made professor of agriculture and head of the experiment station in Iowa State College. Henry Wallace, father of Henry C. and grandfather of Henry A., suggested his name to President McKinley for Secretary of Agriculture. Wilson continued in office for 16 years, remaining under Presidents Theodore Roosevelt and William H. Taft.

Turn of Century Sees Great Advancement

Farm demonstration and cooperative extension work were undertaken during Secretary Wilson's term and a small army of experts and scientists was employed. The Department grew into a magnificent research regulatory, educational and custodial institution, each manifestation of growth representing an effort to provide the services demanded by the public and authorized by Congress. Not only did research in the natural sciences attain very high quality under Secretary Wilson, but social and economic studies advanced rapidly.

While James Wilson held office urban influences on rural life rapidly intensified. Means of transportation and communication vastly improved. The increasing manufacture of automobiles and the improvement of roads gave farmers new access to markets. Competition grew keener and farm credit became an acute problem. The numbers of people engaged in farming grew steadily less. In 1910, only 32.2 percent of all persons gainfully employed were in agriculture, and the estimated average equity of farm operators in the land they tilled was 50 percent.

In his report for 1899 Wilson started the custom of beginning with brief items summarizing the year's outstanding accomplishments. Atwater now had a flow of nutrition bulletins appearing, and Wiley reported on food preservatives. N. E.

Hansen, M. A. Carleton, Water T. Swingle, and David Fairchild were mentioned as plant explorers.

At the turn of the century in 1900 Secretary Wilson expressed his determination of bringing scientists to the aid of farm producers, and to this end 21,000,000 copies of departmental publications had been distributed.

In 1901 the Secretary effected the long-needed reorganization of related departmental units into bureaus. The Bureaus of Plant Industry, Chemistry, Forestry, and Soils were created with chiefs at \$5,000 each. B. T. Galloway became the first head of the Bureau of Plant Industry and Harvey W. Wiley headed the Bureau of Chemistry. Milton Whitney became chief of the Bureau of Soils which took over all work on soil curves, soil analysis, soil technology, and drainage investigations. Gifford Pinchot was made Forester.

Farm Demonstration Experiments Begin

In the report for 1902 we find first mention of the farm-demonstration experiments undertaken to show the value of using scientific cultivation methods on selected "demonstration" farms in various communities. This novel and important idea originated with Seaman A. Knapp of the Bureau of Plant Industry. Ultimately the Extension Service was organized to carry adult education in agriculture right to farmers on their own farms. At that time, though, agricultural editors and farmers' institutes were pioneering in this work that later became an organized governmental activity.

The appearance of the cotton boll weevil speeded Dr. Knapp's farm-demonstration work, as the weevil produced a crisis in cotton production. Texas especially appealed loudly for Federal aid. At one huge mass meeting in Dallas half a million dollars was demanded to fight the weevil. The farm-demonstration method proved an

ideal means of instruction. Dr. Knapp also won praise for the 250,000 acres of rice growing in Texas from varieties he had introduced.

In 1904 Secretary Wilson made reference to farmers as our greatest source of natural wealth and said that well-being was generally diffused among them. The Bureau of Entomology with L. O. Howard at its head had been established in accordance with recommendations made the year before. It was aiding the rapid spread of farm-demonstration work to cope with the boll weevil. The Weather Bureau announced that it would interpret "the language of the sun" at Mt. Weather.

On February 1, 1905 custody of the national forests was transferred to the Department and fused with its Bureau of Forestry to form the Forest Service. The Bureau of Chemistry reported that it had lost many employees due to the low salaries paid. It was studying food poisons and standards and cooperating with the Postoffice Department in protecting the mails from makers of fake remedies. The Bureau of Statistics had considerably improved its crop reporting, and the Office of Road Inquiry became the Office of Public Roads.

In 1906 the Department reported an annual appropriation of \$7,175,690. There were 1,594 employees in Washington and 4,648 in the field. The new East and West Wings of the present Administration Building were nearly complete but by no means large enough.

Dr. Wiley had helped in effecting the passage of his Food and Drug Law on June 30, 1906 and the Bureau of Chemistry was charged with its enforcement. A force of chemists and inspectors had to be appointed, and before long the number of employees in the Bureau of Chemistry was doubled.

Agricultural science had enormously increased production, but this increase was accompanied by a reduction in farm exports and a diminishing rate of population growth. However, farmers could always provide sufficient food for our population, so the Secretary seemed satisfied with conditions. He praised farmer cooperatives as well as the rapid extension of the Farmers Cooperative Demonstration Work.

Country Life Commission a Landmark

President Theodore Roosevelt appointed his Country Life Commission in 1902. The Commission held 30 hearings throughout the nation. In various ways it sought aid from over 100,000 persons. Dr. L. H. Bailey of New York was its chairman. The other members were Henry Wallace of Iowa; Walter Hines Page, who later became war-time ambassador to Great Britain; Gifford Pinchot, the great Forester and later Governor of Pennsylvania; and Dr. Kenyon L. Butterfield of Massachusetts Agricultural College.

The Commission held that a new race of teachers should appear in the country and that a new rural clergy be trained. It suggested increased farmer cooperation, the promotion of rural social advantages, and the expanding of efforts to make country life more "gainful" and more rewarding. It recommended that inventory be taken of our rural resources from the soil up, that a united campaign be instituted for rural progress, and that the extension work be organized on a national basis through the State colleges of agriculture.

It was in 1908 as well that serious study of farm economics was undertaken in the Bureau of Plant Industry with W. A. Peek in charge. The subjects of investigation were farm accounts, farm records, and the economic value of using farm equipment.

By this time the Department was enforcing food, game, drug, bird, livestock, quarantine, and meat-inspection laws, and many others besides. Its work had to expand constantly, as Congress passed new laws and charged the Department with their enforcement.

Farm cooperative demonstration work was widespread now seven years after its inception, and farm children also were being organized in clubs. Farm economic studies continued in the Bureau of Plant Industry where "farm problem or extension work" began. Trained men were being sent out as teachers. W. J. Spillman

spread this farm demonstration work to the North and West; in 1911 he helped establish the first Farm Bureau. Bradford Knapp, son of Seaman A., carried on the farm cooperative demonstration work in the South.

Dynamic Era in The Department

It may truthfully be said that when Secretary Wilson left office with President Taft, a definite era in the history of the Department of Agriculture ended. The incoming President Woodrow Wilson appointed the historian, economist, financier and former college president, David F. Houston, Secretary of Agriculture. The appointment was an appropriate one at this juncture of the Nation's agricultural affairs. Secretary Houston had received a master's degree in government at Harvard. He taught at the University of Texas after which he became president of the land-grant college of that State.

In general it may be said that Secretary Houston ushered in a period when the Department devoted much more attention than before to broad social and economic issues affecting farmers. As he said in his report for 1913: "We have unmistakably reached the period where we must think and plan." Nevertheless study of the evolution of agricultural policies indicates marked continuity throughout. When changes occur the new will be found to have its roots fixed firmly in the old—in some research or fact finding investigation that went on much earlier.

Houston realized that farm-management studies could no longer be carried on effectively in the frame of reference of the Bureau of Plant Industry. He recognized the great importance of the extension work and understood that it should function more independently. He asked and acted upon the advice of such men as Thomas N. Carver of Harvard, George F. Warren of Cornell, Andrew Boss of Minnesota, H. C. Taylor of Wisconsin, James A. Foord of Massachusetts Agricultural College, John I. Falconer of Ohio State, and Richard L. Adams of the University of Cali-

fornia. He inaugurated the "New Freedom" period which actually extended to the death of Henry C. Wallace.

Finally Secretary Houston saw the necessity for greater centralization within the Department and set up a number of staff agencies to effect integration. Originally the Department consisted largely of independent research sections and divisions which generally pursued their own ways.

In response to long-continued agitation and in recognitions of the new emphasis on distribution in agriculture, Congress had provided for specifically, in its appropriation for 1913-14, the acquiring and diffusing among the people, useful information on subjects connected with the marketing and distribution of farm products, and made \$10,000 immediately available. To carry out the intention of Congress Secretary Houston established the Office of Markets, attached directly to his office. Under the leadership of Charles J. Brand it rapidly became one of the spearheads in the vigorous attack on economic and social problems.

In 1914 the Office of Markets was assuming much enhanced importance. The Cotton Futures Act had been passed. Studies of rural credit were under way and better dissemination of information has been effected. The Smith-Lever Agricultural Extension Act was passed on May 8, 1914, and the Extension Service was being organized to carry out its provisions. It provided for the use of personal-contact teaching methods to be financed by the grants-in-aid. Formal agreements between the Department and the land-grant colleges had to be effected. The Office of Information was created.

By 1916 work on marketing, finance, and rural organization mapped in earlier reports, was well under way. Acts establishing standards for staple agricultural products shipped to market, as well as the grain futures, grain standards, warehousing, and Federal farm-loan and Federal-aid road laws had all been passed. The loan act was especially designed to create a banking system tailored to rural needs.

World War Brings Drastic Changes

By 1917 Houston was stressing all efforts to increase farm production for domestic use and export. The Food Administration was started with Herbert Hoover in charge. The cooperative Extension Service sprang into new usefulness in showing farmers how to increase food production to win the war. An additional appropriation of over 4 million dollars was made to expand this work. Farmers responded vigorously, struck the plow into land hitherto untilled, and won praise for it. Home economics work, Federal and State, increased in importance under impact of war conditions.

A record acreage had been planted by 1918 and crop yields had been stimulated in all practicable ways. Every agency was pushing this work. Authority was now granted to use motion pictures for purposes of agricultural education. Interest in farm land increased, land speculation got under way, and farm values shot up miraculously, tempting farmers to top-heavy mortgage indebtedness.

The day following Secretary Houston's resignation to become Secretary of the Treasury, February 2, 1920, Edwin T. Meredith, an Iowa Farm Editor, became Secretary of Agriculture. The latter served until March 4, 1921 and made the report for 1920, in which the farmers were still being praised for glorious wartime service. But Secretary Meredith advised farmers that they now faced a declining market, with shrinkage of land and other values, and the Secretary admitted that there was no simple solution for this complex problem. World conditions were chaotic.

In 1922 President Harding called an agricultural conference in Washington; the Grain Futures Act was also passed this year. The surplus became the chief agricultural problem; it was at first attacked as a marketing, and later as a marketing and production problem.

On March 5, 1921 President Harding appointed Henry C. Wallace, father of Henry A. Wallace, to be Secretary of Agriculture. In his first report, for 1921, Wallace

frankly recognized the dangerous nature of the farmer's position with overexpanded acreage, inflated land values and an uncertain foreign market confronting him, and an industrial depression under way. The farmer was said to produce on faith and take great risks, and his 1920 crops were produced at the greatest cost known.

Marketing was now seen to be an integral part of production, though scientific research was still regarded as basic, and a Director of Scientific Work was appointed. Henry C. Taylor became chief of the new Bureau of Agricultural Economics on July 1, 1922. Work in home economics was also still increasing in importance. Wallace warned that no new land should be opened to cultivation and recommended intensive, cost-lowering methods to farmers.

Secretary Wallace died in office October 25, 1924, and Assistant Secretary Howard M. Gore immediately became Acting Secretary. He was appointed Secretary of Agriculture November 22, 1924, and served until March 4, 1925 when he resigned to become Governor of West Virginia. The 1924 volume was prepared under the direction of Secretary Wallace; Gore transmitted it as Acting Secretary.

The Bureau of Dairying was established by act of Congress of May 29, 1924. The dairy industry had asked for the establishment of a bureau to consolidate work in this field.

It almost seemed as if the departmental research workers had overreached themselves. Set to lowering the unit costs of agricultural production and to improving yields, they had succeeded so admirably as to aid in producing enormous surpluses.

Only 21.5 percent of all our people gainfully employed were engaged in agriculture in 1930 and the estimated average equity of farm operators in the land they farmed was only 41 percent. The latter figure dropped to 39 percent 5 years later. The agricultural export market suffered increasingly serious competition; the day of loans to Europe had passed, and our own tariff walls not only effectively shut out foreign goods but stimulated similar action on the part of other nations. The

highly protective Hawley-Smoot Tariff Act was passed in 1930.

Industrial Prosperity Masks Real Conditions

On March 5, 1925, William M. Jardine, President of the Kansas State College of Agriculture, took office as Secretary of Agriculture and served until March 4, 1929. During his term ominous conditions in agriculture were somewhat masked by the spurious and highly specialized industrial and financial "Prosperity."

Agricultural exports were said to have increased. The farm-credit situation was regarded as bad, the small farmer suffered, and local agricultural credit organizations were suggested as a remedy. In some regions it was held there was actually lack of confidence in future expansion.

Agricultural pressure groups also recommended the passage of laws to authorize the setting up of agricultural credit corporations and for expanding livestock grazing rights in national forests. Investigations were already under way on high freight rates and farm taxes, and it was insisted that the tax load must be in part removed from farm property. The Department also saw that it must aid in the business organization, management, and operation of farm cooperatives, as well as the education of farmers in regard to them.

In 1927 the farm problem was still acute. The Secretary suggested that wastes be cut, production costs diminished, the margin between producer's cost and consumer's purchasing price lessened, the costs of transportation and distribution reduced, the tax burden redistributed to help reduce the farmer's overhead, and that farmers cooperate to enhance their bargaining power. What should be done was clearly seen; how to do it remained puzzling.

Cooperative marketing had made progress, but united farmer action would be required to adjust production to demand. The problem of land utilization had assumed importance. This was directly counter to the traditional trend of

individual exploitation of land resources. We had more acres in cultivation now than we needed.

The cumulative pressure of agricultural problems increased continually. In 1929 general panic and depression burst on the country. Arthur M. Hyde, a former Governor of Missouri, became Secretary of Agriculture March 5, 1929 to serve until March 4, 1933. His first report reviewed the agricultural industry as a whole and the several crops specifically.

Meanwhile the Federal Farm Board had been organized. An adjunct of the Department, the Board had authority to create commodity stabilization corporations and to recognize and collaborate with farmer cooperatives. It could make loans from a half-billion-dollar revolving fund, but it had no control over production or acreage.

"The 1930 Drought" was the first subhead in Secretary Hyde's report for that year. The effects were so extended that relief would be required. The Red Cross had given aid, and Congress made emergency loans of 6 million dollars available both in 1929 and in 1930, although \$4,580,683 of the first 6 million dollars had already been repaid.

The Secretary contended once again that the tariff act of 1929 aided farmers by protecting their domestic market. On June 5, 1930 Congress provided for an expansion of the foreign agricultural service. The Bureau of Dairying was now the Bureau of Dairy Industry. The Grain Futures Administration made a separate report again. M. S. Eisenhower signed a report as Director of the Office of Information.

In the 1931 volume world influences were accused of depressing American agriculture which lacked a foreign market and was therefore surplus-burdened. Agriculture would positively benefit from the high tariff just as soon as we learned to quit producing for an export market that no longer existed.

The Department's basic task was still held to be scientific research, the results of which were not intended so much to stimulate production as to help balance supply and demand, guarantee the dependability of production, raise living

standards, and aid industry as a whole. This research also helped find new uses for agricultural commodities, thus founding new industries and spreading employment. It also improved the quality of commodities.

The Department had been a pioneer in developing wise land use policies; it had formulated the entire theory. A National Land Use Conference had been held in Chicago at its suggestion where all relevant ideas were discussed and programs were mapped out. The farm plant was still too large and land submarginal for agriculture simply contributed to tax delinquency, hence it must be kept out of cultivation. Soil erosion also must be stopped. Secretary Hyde said that the recommendations made by the conference on land use would be carried out.

Henry A. Wallace

On March 3, 1933 Henry A. Wallace, an Iowa farm editor and son of Henry C. Wallace, became Secretary of Agriculture. Actions taken at this time had roots in the research, the discussion, and the social and economic thinking carried on in the Department during the previous decade.

Congress accordingly passed the Agricultural Adjustment Act, approved May 12, 1933. Here again, it should be noted, there was no sharp break with the past. The ideas in that act had been mulled over frequently within as well as outside the Department. W. J. Spillman had some of the notions in his "Balancing the Farm Output" published in 1927, and M. L. Wilson, also previously an employee of the Department, was in part responsible for drafting the act. Howard R. Tolley and Charles J. Brand, also associated with the legislation, were not new to the Department.

Named as co-administrator of the Agricultural Adjustment Act with Mr. Brand, George N. Peek of Moline, Ill. had been another advocate of new methods of coping

with the farm surplus problem. These men, together with a Department economist, Mordecai Ezekiel, had much to do with pioneering the new era of adjustment and departure from precedent.

The Adjustment Act, as Secretary Wallace analyzed it in his first report, sought to raise the income of farmers in two ways. (1) Production was to be adjusted to demand. (2) The Secretary of Agriculture was to enter into marketing agreements with producers, processors, and distributors of agricultural products, in order to eliminate competitive wastes, improve trade practices, move surpluses into the market, and raise producers' prices.

The Agricultural Adjustment Act, generally referred to as the A.A.A. necessarily provoked thoughtful criticism as well as approval. In his report for 1935 Secretary Wallace considered a number of the issues that had been raised. He denied that the measure sought to create artificial scarcity. Given a rising demand for a particular commodity, production would be increased accordingly. The long-term objective of the program was to prevent recurring cycles of over and underproduction.

The Secretary reported that the stock of surpluses had been sharply reduced. This was due partly to the production curtailments of the national farm program. Another very important factor was the drought of 1934, which was the worst ever recorded in the United States. It extended over 75 percent of the country, severely affecting 27 States.

It was announced that several important changes had been made in the organization of the Department. The position of Under Secretary of Agriculture had been created and Rexford G. Tugwell appointed to fill the post. There was no longer to be a Director of Scientific Work, and an Office of Budget and Finance had been created.

In January 1936 the Supreme Court in the Hoosac Mills case invalidated the compulsory features of the Agricultural Adjustment Act. Congress thereupon passed the Soil Conservation and Domestic Allotment Act. The Annual Report for

1937 contains a detailed description of this measure and the steps taken by the Department to enforce it. The discussion is prefaced by a noteworthy analysis of our national agricultural policy.

An altered economic world called for a new agricultural policy. But the link between the old and the new was direct and close. The old exploitation forced the new conservation. The Federal Farm Board, the McNary-Haugen plan, the A.A.A. programs, and the Soil Conservation and Domestic Allotment Act had one basic characteristic in common. They all recognized that modern problems cannot be solved by ancient formulas, and that agricultural policy today is necessarily in large measure the opposite of what it was in the period of the open frontier.

Secretary Wallace's final report cited the unpromising export outlook and the ominous rise of economic nationalism. It detailed the wide variety of defense functions the Department was performing and could perform. On September 4, 1940, Secretary Wallace resigned his post to become a candidate for the Vice Presidency. Under-Secretary Claude R. Wickard of Indiana became the next head of the Department.

It was the Agricultural Adjustment Act of May 12, 1933, which ushered in much new legislation that resulted in the setting up of the so-called "action agencies" of the Department. This act was designed to establish and maintain such balance between the production and consumption of agricultural commodities, and such marketing conditions therefor, as would reestablish prices to farmers at a level that would give farm products the purchasing power they had in specified earlier base periods. The base period for most commodities was 1909 to 1914.

Some of the legislative acts authorizing other parts of this action program were as follows: The Emergency Farm Mortgage Act of 1933; the Farm Credit Act of 1933; the Federal Farm Mortgage Corporation Act and the Jones-Costigan Sugar Act of 1934; the Soil Erosion Act of 1935; the Soil Conservation and Domestic Allotment Act, the Rural Electrification Act, and the Flood Control Act of 1936; the Agricultural Marketing Agreement legislation, the act placing the functions of the Federal Surplus Commodities Corporation in the Department, the Bankhead-Jones Farm Tenant

Act, the Norris-Doxey farm forestry legislation, the Pope-Jones water facilities legislation, and the Sugar Act, all of 1937; and the Flood-Control Act, the Agricultural Adjustment Act, and the Federal Crop Insurance Act of 1938.

Some of these agencies were created as independent establishments and later came to the Department where some of them have since undergone changes in name and structure. The Farm Credit Administration was created in 1933, but became part of the Department only on July 1, 1939. The Rural Electrification Administration was set up as an independent agency on May 11, 1935, and came to the Department July 1, 1939. The Commodity Credit Corporation was established October 17, 1933, and was placed in the Department July 1, 1939.

Second World War

Secretary Wickard was an Indiana dirt farmer. He graduated from Purdue with a degree in animal husbandry and, even before that, began helping to operate the family farm settled by his great-grandfather in 1840. He continued to manage the farm after he came to Washington in 1933. Before that he had been a member of the Indiana State Legislature. He was a member of the National Corn-Hog Committee of Twenty-Five which helped establish the original corn-hog program of the Agricultural Adjustment Administration.

In 1935, Mr. Wickard became chief of the Agricultural Adjustment Administration corn-hog work, thus being the third future Secretary to work in the Department in a subordinate capacity before assuming that office. When the Agricultural Adjustment Administration's agricultural conservation program started in 1936, Mr. Wickard became assistant director of the North Central Division. He was appointed Under Secretary of Agriculture on February 1, 1940.

On March 29, 1943, Chester C. Davis became the first War Food Administrator,

serving until he resigned June 28, 1943; he was succeeded by Judge Marvin Jones, who served until the War Food Administration was recombined with the Department of Agriculture by Executive Order effective July 1, 1945. Mr. Wickard became head of the Rural Electrification Administration at this time.

An Office of Agricultural Defense (later War) Relations was set up in the Department on May 5, 1941, in response to a letter from the President. On July 5, Secretary's Memorandum No. 921, established State and county defense boards. On December 13, 1941, there was announced a major reorganization of the Department to streamline it for the war effort. This was validated by an Executive Order dated February 23, 1942. At this time three large administrations were established as follows: The Agricultural Conservation and Adjustment Administration (later Agricultural Adjustment Agency,) the Soil Conservation Service, the Federal Crop Insurance Corporation, and the Sugar Division.

The Agricultural Marketing Administration was created by merging the activities of the Surplus Marketing Administration, the Commodity Exchange Administration, the Agricultural Marketing Service, and the Consumers' Counsel Division of the Agricultural Adjustment Administration.

The Agricultural Research Administration was created by grouping the activities of seven old-line scientific bureaus and agencies concerned with research and regulatory work, four Regional Research Laboratories, and nine Bankhead-Jones Laboratories. The Agricultural Research Center at Beltsville, Md., was also placed under the supervision of the Administrator.

On June 9, 1942, the White House announced the appointment of a Combined Food Board, composed of the Secretary of Agriculture and the head of the British Food Mission. It was to effect planned and expeditious utilization of the food resources of the United Nations.

Streamlining For War

Fundamental reorganization of the Department again took place as a result of the Executive Order, dated December 5. At that time the Food Production Administration and the Food Distribution Administration were established. These, with the Agricultural Research Administration, the Commodity Credit Corporation, the Forest Service, and Rural Electrification Administration, and the staff agencies, then constituted the Department.

Naturally the Secretary's wartime powers invested the Department with much more authority and importance than it had ever possessed hitherto. It began to touch the lives of every citizen and to assume a defense and later wartime role of the most critical character. Mr. Wickard's first annual report, submitted on November 1, 1941, was prefaced by a "postscript" announcing the Japanese attack on Pearl Harbor and our precipitation into World War II.

Gradually we began to produce what was needed for defense and war purposes, when needed, and in the quantity required. Farmers rose to new heights of efficiency each production year, the Department acting as over-all staff counselor and adviser. The Department became active in the fields of labor supply, plant site location, and transportation problems, and rendered assistance to farmers in procuring supplies and equipment, priorities and allocations.

A special far-reaching nutrition program was undertaken in foreknowledge that all our people must be reasonably well fed to meet the forthcoming emergency, and that we must also produce much food for our potential and probable allies. The war-time job of the Agricultural Adjustment Administration became greater than ever before. The year's production was outstandingly favorable and we entered the war far better fortified than we would have been had no national farm program existed.

Through the State and County War Boards the Department gave farmers technical aid, made arrangements about price supports and money payments, and generally

assisted them to fulfill their goal pledges. Every agency in the Department did its utmost to assist the Food and Freedom Program. Food conservation was stressed and scarce farm foods began to be allocated to specific needs. A research food-dehydration project soon showed the way to save cargo space and get more actual food value abroad more rapidly than ever.

WAR FOOD ADMINISTRATION

For war purposes the program agencies of the Department of Agriculture were grouped into two administrative units, each headed by an official appointed by and directly responsible to the President. The agencies in the War Food Administration were responsible to the War Food Administrator. The Agricultural Research Administration, Farm Credit Administration, Rural Electrification Administration, and Forest Service were responsible to the Secretary of Agriculture.

On April 30, 1943, the War Food Administration announced an organization to administer the farm labor program. The Director of the Extension Service became responsible for mobilizing farm labor for use within each State, and for the placing of all workers needed on farms to meet local labor needs.

An Office of Materials and Facilities, to aid farmers with their procurement problems, was established May 10, 1943, by War Food Administrator's Memorandum No. 4. The War Meat Board was established May 15, 1943, to facilitate the handling of the Nation's meat supply.

A Director of Transportation was appointed May 26, 1943. On August 25, 1943, the War Food Administration announced the establishment, effective September 1, of a National War Board.

The following changes in names of some old-line Department bureaus should also be mentioned. In February 1943, certain organizational and structural shifts were

made in the bureaus comprising the Agricultural Research Administration in the course of which the Bureau of Home Economics with the addition of the Division of Protein and Nutrition Research, formerly of the Bureau of Agricultural Chemistry and Engineering, became the Bureau of Human Nutrition and Home Economics; the Bureau of Agricultural Chemistry and Engineering became the Bureau of Agricultural and Industrial Chemistry, with the four Regional Research Laboratories now comprising most of it; and the Bureau of Plant Industry became the Bureau of Plant Industry, Soils and Agricultural Engineering.

Greater and Greater Food Production

During 1943 farm food production, as well as farm production generally, again set a record. The Department and the War Food Administration regarded food as a munition of war.

A new farm production record was set for 1943 and new goals were developed for 1944. The price stabilization problem occupied much attention. The Commodity Credit Corporation greatly expanded its operations in response to wartime emergency needs. Government food procurement was stepped up enormously and rationing was applied to a number of foods.

Peace and the World View

The world viewpoint assumed by the Department is significant of the way in which science had shrunk distances. Agriculture now had to be considered, not only in relation to domestic industry, but in the light of world finance and the plans of the United Nations as well. The world organizations of agriculture came into the picture with the meeting of the United Nations Food and Agriculture Conference,

at Hot Springs, Va. in May and June 1943. The constitution for the Food and Agriculture Organization was already being proposed.

During the war many new discoveries and ideas, ranging all the way from the natural to the social sciences, which had resulted from research, but were restrained from full utilization by the long depression, came into their own and could be used at top efficiency. Among these were better varieties of plants and animals, better protection from insect pests and plant and animal diseases, expanding mechanization, improved cultural and fertilizing methods, increased storage of fertility in the soil by the widespread use of conservation measures, the farm security device of supervised loans which gave borrowers funds and expert advice together in one package, and the use of price incentives and other economic devices to get the needed crops at the right time.

But, as peace approached, War Food Administrator Jones saw the need for reorganization and reconsolidation, and he resigned and returned to the bench that this might take place. Secretary Wickard at the same time became head of the Rural Electrification Administration.

On July 1, 1945, Clinton P. Anderson took office as Secretary, to have charge of both the Department of Agriculture and the War Food Administration, and to consolidate and organize them as he thought best. He regarded himself as primarily a businessman rather than a farmer, though he grew up on a farm, and also operated 800 acres of irrigated land in New Mexico as a dairy enterprise. In addition, he retained direction of the home farm of 640 acres, near Mitchell, S. Dak. At the time of his appointment he was a member of the U. S. House of Representatives, serving his third term, and had been chairman of a committee investigating food shortages. Born at Centerville, S. Dak., he was educated at Dakota Wesleyan and at Michigan universities. The first job facing him was departmental reorganization.

On June 29, 1945, the President, by Executive Order No. 9577, provided for the abolition of the War Food Administration and for the transfer of its functions to

the Department of Agriculture. In Memorandum No. 1106, July 3, 1945, the Secretary announced the appointment of a Committee on Reorganization, Milton S. Eisenhower, chairman. Its duty was to confer with all agency heads, and so to intergrate the War Food Administration and the Department of Agriculture as to avoid overlapping, duplication, and inefficiency in service to the public. Secretary's Memorandum No. 1118, August 18, 1945, announced the establishment of a Production and Marketing Administration which was, in effect, a consolidation of many agencies.

Famine Overseas and Its Relief

The President's 9-point Famine Relief Program was announced February 6, 1946, and the Department immediately began to take steps to launch it. Review of the Department's food programs was ordered February 15 and revision of 1946 farm-production goals on February 21.

The Famine Emergency Committee, after an all-day session at the Department, announced on March 11, its specific recommendations for the conservation of wheat, wheat products, and food fats and oils.

On April 9, a report by Herbert Hoover to the Famine Emergency Committee on European food needs was released and the next day the Secretary issued a call for world aid in the food fats and oils crisis.

New Legislation

The Research and Marketing Act, which became law August 14, 1946, provided for extension and expansion of Department research programs. The Farmers Home Administration Act became law the same day, abolishing the Farm Security Administration as such, establishing the Farmers Home Administration, and giving it various functions and responsibilities, including some which formerly lodged in the

Farm Credit Administration.

In late 1946 an outbreak of foot-and-mouth disease was discovered in the Republic of Mexico and it rapidly spread over that country. Special legislation and the consent of the Mexican Government enabled the United States to cooperate with her nearby neighbor in efforts to stamp out the infection before it reached our livestock. This campaign began in 1947, and ended in 1952.

From the beginning to the end of his administration Secretary Anderson called for practically all-out farm production; this he did regardless of what curtailment plans industry might undertake. He consistently praised the ability, industry, and integrity of the Department's information work and differentiated sharply between it and propaganda. He resigned May 10, 1948, to run for the Senate.

Further Changes

Secretary Anderson was succeeded in office by his own Assistant Secretary, Charles F. Brannan, a native of Denver and graduate from the University of Denver Law School. Mr. Brannan specialized in irrigation and mining cases in private practice until he became an assistant regional attorney for the Resettlement Administration, in 1935. Two years later he became Regional Attorney for the Department's Office of the Solicitor, with headquarters still in Denver.

In 1941, Mr. Brannan became Regional Director of Farm Security Administration for Colorado, Wyoming, and Montana, still in his native city.

In 1944 he was called to Washington to become Assistant Administrator of Farm Security Administration, and was appointed Assistant Secretary of Agriculture two months later. As Vice Chairman of the Department's Program and Policy Committee he had much to do with formulating and carrying out policies, and he presented the Department's long-range agricultural program to Congress, in 1947.

He was succeeded by Secretary Ezra Taft Benson on January 21, 1953.

Benson Takes Office

Secretary Benson is a nationally known farm leader and a member of the Quorum of Twelve Apostles, Church of the Latter Day Saints, Salt Lake City, Utah. He was born at Whitney, Idaho, August 4, 1899, the son of George Taft and Sara (Dunkley) Benson.

He was a student at the Oneida State Academy, Preston, Idaho. His later educational career is as follows: The Utah State Agricultural College, Logan, Utah, 1918-21; B. S. from Brigham Young University, Provo, Utah, 1926; M. S. in agricultural economics, Iowa State College, 1927; graduate study, University of California, 1937-38.

Secretary Benson operated a farm in southern Idaho, 1923-29. In 1921-23 he served as a missionary for the Church of Jesus Christ Latter Day Saints in the British Isles and Europe. In 1929-30 he worked as a county agent for the University of Idaho Agricultural Extension Service at Preston, Idaho. From 1930 to 1938 Secretary Benson was extension economist and marketing specialist, in charge of economics and marketing work for the State of Idaho.

In the period of 1939-41 he served as executive secretary of the National Council of Farmer Cooperatives at Washington, D. C. Since 1943 Secretary Benson has been a member of the executive committee and was chairman of the board of trustees, American Institute of Cooperation at the time of his nomination (now resigned). He has been awarded scholarship, Gamma Sigma Delta, honorary society of agriculture, Iowa State College, and a fellowship at the University of California, Berkeley Calif.

He was a member and later the president of the Boise Stake of the Church of Latter Day Saints, Boise, Idaho, and during his stay in Washington, D. C. he was president of the Washington Stake. In 1946 he was named president of European missions for the Church. He serves on two national Boy Scout committees, is now on the executive committee of the National Boy Scouts of America. He has always

been deeply concerned with 4-H clubs and all youth welfare organizations. He belongs to the American Marketing Association, the Farm Economics Association, the Rotary Club, and Delta Nu fraternity. He has been a frequent contributor to agriculture, cooperative, and religious publications. He received the honorary recognition award from the College of Agriculture, University of Wisconsin, in February 1952.

Realignment Orders

On January 21, 1953, Secretary Benson issued Memorandum No. 1320 which set up five groups among the agencies for better administration. Then on March 10, 1953 by a supplemental memo to Memorandum No. 1320 he announced the regrouping of the Department's services into six groups with the addition of Foreign Agricultural Service with a Director of Foreign Agricultural Service as its head, thereby discontinuing the Office of Foreign Agricultural Relations.

This action was taken, according to the Secretary, to make possible a closer coordination of related activities. All the regrouped agencies retained their existing structure with the exception of the Agricultural Conservation Program. This was transferred from the Production and Marketing Administration and placed with the Research, Extension, and Land-Use Group.

The six groups, the agencies in each, and the officials named to head them:

Research, Extension, and Land-Use—Agricultural Conservation Program, Agricultural Research Administration, Bureau of Agricultural Economics, Extension Service, Forest Service, and Soil Conservation Service; with J. Earl Coke, Assistant Secretary, in charge.

Commodity Marketing and Adjustment—Commodity Credit Corporation, Commodity Exchange Authority, Federal Crop Insurance Corporation, Production and Marketing Administration; John H. Davis, President of the CCC as Director.

Foreign Agricultural Service—R. E. Short, Director

Agricultural Credit Services—Farm Credit Administration.

Farmers Home Administration, and Rural Electrification Administration; Robert L. Farrington, Acting Director.

Departmental Administration—Hearing Examiners, Library,

Office of Budget and Finance, Office of Information, Office of Personnel, Office of Plant and Operations; Richard D. Aplin, Director

Office of the Solicitor—Karl D. Loos, Solicitor

Reconstitution Under Reorganization

Secretary's Memorandum dated June 4, 1953, announced that the Reorganization Plan No. 2 of 1953 had become effective at midnight on June 3. It transferred to the Secretary of Agriculture all functions within the Department not then vested in the Secretary, with certain exceptions. The Plan also provided for two additional Assistant Secretaries of Agriculture, an Administrative Assistant Secretary, and authority to the Secretary to make provisions for the performance of his functions, including any functions transferred under the Plan.

Until such time as any different dispositions may be ordered, the Secretary reconstituted the Department as it existed immediately prior to the effective date of Reorganization Plan No. 2, 1953. All agencies were thereby reassigned all functions transferred to the Secretary as they existed immediately prior to the effective date of the Plan. All actions by such agencies and officers taken prior to June 4, 1953 and still in force immediately prior to the effective date of Plan No. 2 were deemed to remain in force unless and until revoked or modified by proper authority.

Reorganization

In a Memorandum to All Department Employees, the Secretary on October 13, 1953 announced a reorganization of the Department. This reorganization was put in effect November 2, 1953.

The new organization put all service agencies of the Department under four main groups:

FEDERAL-STATES RELATIONS: Agencies in this group include:

Agricultural Research Service, Forest Service, Federal Extension Service, Soil Conservation Service, Agricultural Conservation Program Service, and Farmer Cooperative Service.

MARKETING AND FOREIGN AGRICULTURE: Agencies in this group:

Agricultural Marketing Service, Foreign Agricultural Service, and Commodity Exchange Authority.

AGRICULTURAL STABILIZATION: Agencies in this group:

Commodity Stabilization Service (including the administration of Commodity Credit Corporation programs), Federal Crop Insurance Corporation, and Community, County, and State Agricultural Stabilization and Conservation Committees.

AGRICULTURAL CREDIT: Agencies in this group:

Farmers Home Administration and Rural Electrification Administration.

On April 1, 1954, Secretary Benson regrouped the Department's Office of Information. The six media divisions were regrouped into three general activity divisions—current information, publications, and visual.

Services To Meet Specific Problems

The technological revolution in agriculture, adjusting from wartime to peacetime markets, continued drouth in the Great Plains and the continuing problem of conserving the Nation's soil and water resources led to the inaugurating of four new programs:

1. The Soil Bank Program.
2. The Rural Development Program.
3. The Great Plains Program.
4. Foreign Trade Development and Expansion.

Dedicated employees in the Department shouldered added work and new responsibilities as these programs were manned and put into operation. At the same time new challenges were met and handled by administrators, scientists, and others in the various agencies of the Department. For example; surplus farm commodities held in storage as a result of price support programs were reduced, foreign trade was increased, and infestations of the Khapra beetle, the Mediterranean fruit fly, fire ant, witchweed, gypsy moth were met and losses greatly reduced.

In his report to President Eisenhower, Secretary Benson listed a number of ways in which the Department can and does help farmers and ranchers to meet their many problems:

Searching out new facts and getting this information widely distributed.

Helping farmers and rancher conserve and use their soil, water and forest resources.

Aid to farmer cooperatives.

Finding new crops, new uses, and expanded markets.

Constructive use of credit services supplementing private services.

Strengthening farmers' bargaining power.

Marketing research.

Supporting prices of farm products at reasonable levels -- for use not storage.

The four new programs were designed to make more effective the services of the Department in meeting specific problems in agriculture.

The Soil Bank

The Agricultural Act of 1956 provided funds for a Soil Bank Program comprised of two parts: (1) An Acreage Reserve Program designed for immediate and temporary use. Payments were made to farmers for reducing their acreages of wheat, cotton, corn, tobacco, peanuts and rice below their farm allotments for these crops. (2) A Conservation Reserve Program designed to reduce acreages of general crops and to divert these acreages to conservation uses such as grass-land, forest or other permanent protective practices.

The Soil Bank has three major objectives: (1) Reduction of surplus of farm commodities. (2) Strengthening the farm income. (3) Promotion of soil and water conservation.

The 1957 crop year was the first full year of operation under the Soil Bank Program. Under the 1957 operation, nearly a million agreements were signed putting 21 million acres of allotment land into the Acreage Reserve. In 1957, about 85,000 farmers signed agreements to put over 6.4 million acres in the Conservation Reserve.

For the 1958 crop year, slightly more than 27.6 million acres were in Soil Bank programs. This total includes over 17.1 million "allotment" acres of wheat, corn, cotton, tobacco, and rice in the one-year Acreage Reserve; almost 4.1 million acres placed in the long-range Conservation Reserve under 1958 contracts; and 6.4 million acres in the Conservation Reserve under contracts signed in 1956 and 1957. The 17.1 Acreage Reserve acres were placed in the program under 1,050,000 agreements signed by farmers. The Acreage Reserve part of the program ended with the 1958 crop year.

The Rural Development Program

The Rural Development Program was started to open wider the doors of opportunity for people in the Nation's underdeveloped rural areas. Attention was focussed on this problem by a Department report submitted to President Eisenhower in 1955. This report — "Development Of Agriculture's Human Resources" — showed that in the U. S. in 1950 there were roughly 5.4 million farm operator families of which 1.5 million had cash incomes under \$1,000 for the year.

To meet this problem, agencies and organizations working in the fields of education, public health, industrial development, social security, civic improvement as well as agriculture were enlisted in an effort to provide opportunities for the people living in these underdeveloped areas.

Early in June 1955, agricultural leaders, from Land-Grant Colleges in States with the most serious problems of rural underdevelopment, met in Memphis, Tenn., with representatives of the Department of Commerce, Labor, Agriculture and Health, Education and Welfare.

Prior to this meeting, True D. Morse, Under Secretary of Agriculture, had been assigned the responsibility of heading the Department's work in this new "Rural Development Program."

A total of 30 States and Puerto Rico have formed "rural development committees" of representatives from farm and non-farm agencies and have set up organized pilot — or demonstration — counties. Nearly 100 such counties are now taking part in rural development on a pilot county or trade area basis.

Former Purdue University Dean of Agriculture Harry J. Reed was appointed national coordinator for the program August 19, 1957. He is administratively responsible to the Committee for the Rural Development Program comprised of True D. Morse, Under Secretary of Agriculture, Chairman; O. Hatfield Chilson, Under Secretary, Department of Interior; Walter Williams, Under Secretary, Department of Commerce; James T. O'Connell, Under Secretary, Department of Labor;

Dr. John A. Perkins, Under Secretary, Department of Health, Education and Welfare; Wendell B. Barnes, Administrator, Small Business Administration; and Dr. Joseph S. Davis, Member, Council of Economic Advisors to the President.

Late in August 1956, the Department allocated funds, for the first time, to the States for staffing Rural Development Program positions at State and County levels. Workers were assigned in pilot counties to increase on-the-farm education; help development committees in their organization and planning; increase soil, water, and forest conservation; conduct surveys; and administer credit programs.

As of September 1957, more than 350 new development projects in agriculture, forestry, marketing, industry promotion, health and vocational training were underway. These projects were planned and put together at the county and area level to meet specific needs.

Principal activities include: Increased extension work with its on-the-farm and in-the-home educational programs; technical aid aimed at improved use of soil, water and timber resources; a campaign to expand industry; help in finding employment for underemployed rural workers on a part-time or full-time basis; setting up vocational training for rural young people; and special attention to community health and welfare needs.

The Great Plains Program

The tremendous hazards of farming in the Great Plains is indicated by the fact that this region has been called both "the Nation's breadbasket" and "the Dust Bowl." This area, comprised of parts or all of 10 states, contains 37 percent of the Nation's land area and 40 percent of the cropland.

Normally it produces 60 percent of the country's wheat and 35 percent of the cattle. This region, however, is subject to severe climatic variations. Prolonged drouth and high winds convert much of it into an inferno of dust and destruction. This may be followed by several years of adequate rainfall for bounteous wheat crops. During these periods the natural grasslands have been plowed up adding further to problems of periods of low rainfall.

Several years of severe drouth in this region led to the calling of a Great Plains Agricultural Conference in Denver, Colo., May 31 - June 2, 1955. The Governors of 8 of the 10 Great Plains states and Governor's representatives of the other 2 met with Secretary Benson to draw up recommendations to meet the current emergencies and to plan a long-time program of land-use in the area.

Many of the recommendations for the Great Plains Program came from the Great Plains Agricultural Council — an advisory group of agricultural leaders in the states. These recommendations were based on 20 years of organized study, observation and experience.

Continued drouth and suffering in the Southern Great Plains led President Eisenhower to tour this area with Secretary Benson in January 1957. This drouth, which began in 1950 in parts of this area, was the fourth in the 75-77 years since it was first settled by farmers.

Immediate emergency actions as well as measures to reduce the severity of future drouths on the economy of the region in the future were taken up at the conclusion of the President's tour in a special meeting on drouth and other natural disasters at Wichita, Kan., January 14-16, 1957.

A more stable agriculture, a more dependable source of income and a progressively more satisfactory livelihood were set as goals for the program. The Department is helping out by intensifying the SCS land-classification survey of the area as a basis for land-use adjustments; by providing on-the-farm technical assistance upon request of farmers and ranchers; by sharing the cost, under the Agricultural Conservation Program, of installing and establishing practices designed to protect and improve the land and sometimes limited water resources of this region; by making credit more accessible both for short- and long-term loans; and by strengthening Federal Crop Insurance.

In addition, the Department's research and education projects having to do with the problems of the Great Plains were stepped up to give greater stability and more satisfactory returns to the farmers and ranchers of this area in the future.

Rains returned to the Plains in 1957. The moisture provided farmers an opportunity to begin improving ranges, returning shallow, "blow" soils to grass, and making other land use and cropping changes to help lessen the damage from the next drouth.

Farmers and ranchers also had a new tool to help them stabilize their agriculture. It was provided by the Congress in 1956 with the passage of Public Law 1021 authorizing a Great Plains Conservation Program.

Under this new program which was started in 1957, the Federal government offers cost-share help, to speed up changes in land use and cropping systems, with the application of soil and water conservation practices required by these changes. Cost-sharing for applying needed conservation measures is guaranteed by contract with the Department of Agriculture. The length of the contract (from 3 to 10 years) is determined by the time required to carry out the complete farm or ranch plan, approved by the Secretary of Agriculture, which that contract supports. The Soil Conservation Service has administrative responsibility for the program, but other agencies provide help according to their assignments.

Foreign Trade Development and Expansion

To regain foreign markets lost through trade barriers and artificial prices on some of the Nation's farm commodities and to reduce surpluses which continued to pile up under price support operations, the Department in 1955 launched an extensive and intensive foreign trade campaign. This campaign was backed up by the Agricultural Trade Development and Assistance Act of 1954 — Public Law 480.

Strengthening of foreign markets for U. S. farm products was approached along a broad front. Steps were taken to lower foreign trade barriers. Foreign marketing research was stepped up. Agricultural attaches provided information and contact service. Government-financed programs helped to expand exports.

Action was taken in 3 major fields:

1. Effort was continued toward reducing foreign trade barriers and gaining freer access to foreign markets for U. S. farm products. The importance of this activity is indicated by the fact that 75 percent of our farm products now go to countries which, through reciprocal trade agreements, have liberalized their acceptance of our farm products.

2. Foreign currencies, obtained through sales of surpluses to foreign countries, have become available for market promotion work. In 1956-57, the Department's Foreign Agricultural Service brought its market promotions to a total of 69 cooperative projects with 31 U. S. trade organizations in 26 countries. These projects included the export promotion of such leading U. S. commodities as wheat, cotton, dairy products, soybeans, poultry, fruits, tallow, lard, beans, feed rice and seeds. They also, included special studies on opportunities to sell to foreign buyers, vigorous effort to make U. S. farm products at international trade fairs.

3. FAS administered Title I of Public Law 480, the Act that permits sale of U. S. agricultural surpluses for foreign currencies. Shipments under Title I significantly added to our exports, since they accounted last year for nearly 20 percent of the export total.

As a result U. S. agriculture in 1956-57 supplied approximately 22 percent of all world agricultural exports, setting a new all-time high level of \$4.7 billion. Twelve cents of each marketing dollar received by U. S. farmers came from exports. While government programs contributed substantially to the export total, exports under commercial dollar sales also were \$700 million higher than the previous year.

Exports were the equivalent of these percentages of the year's production: milled rice, 83 percent; cotton and linters, 59 percent; wheat and flour, 54 percent; tallow and greases, 45 percent; soybeans and oil, 35 percent; tobacco, 26 percent; lard, 22 percent.

Due in important part to large volume exports, the surplus of agricultural products — which had been climbing — was appreciably reduced.

U. S. DEPARTMENT OF AGRICULTURE

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True D. Morse - Under Secretary

Ralph S. Roberts - Administrative Assistant Secretary

Miller F. Shurtleff - Executive Assistant Secretary

Assistants to the Secretary: Martin Sorkin

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Clyde A. Wheeler, Jr.

Charles Figy

Theodore S. Gold - Assistant to the Under Secretary

Thomas J. Flavin - Judicial Officer

Miles Horst - Staff Assistant, Program Appraisal

Bert M. Tollefson, Jr. - Program Liaison Officer

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Byron T. Shaw Administrator Agricultural Research Service

Joseph G. Knapp Administrator Farmer Cooperative Service

Clarence M. Ferguson Administrator Federal Extension Service

Richard E. McArdle Chief Forest Service

Donald A. Williams Administrator Soil Conservation Service

MARKETING AND FOREIGN AGRICULTURE

Don Paarlberg Assistant Secretary

Oris V. Wells Administrator Agricultural Marketing Service

Rodger R. Kauffman Administrator Commodity Exchange Authority

Max Myers Administrator Foreign Agricultural Service

AGRICULTURAL STABILIZATION

Marvin L. McLain Assistant Secretary

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Walter G. Berger Administrator Commodity Stabilization Service

Frank N. McCartney Manager Federal Crop Insurance Corporation

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Kermit H. Hansen Administrator Farmers Home Administration

David L. Hamil Administrator Rural Electrification Administration

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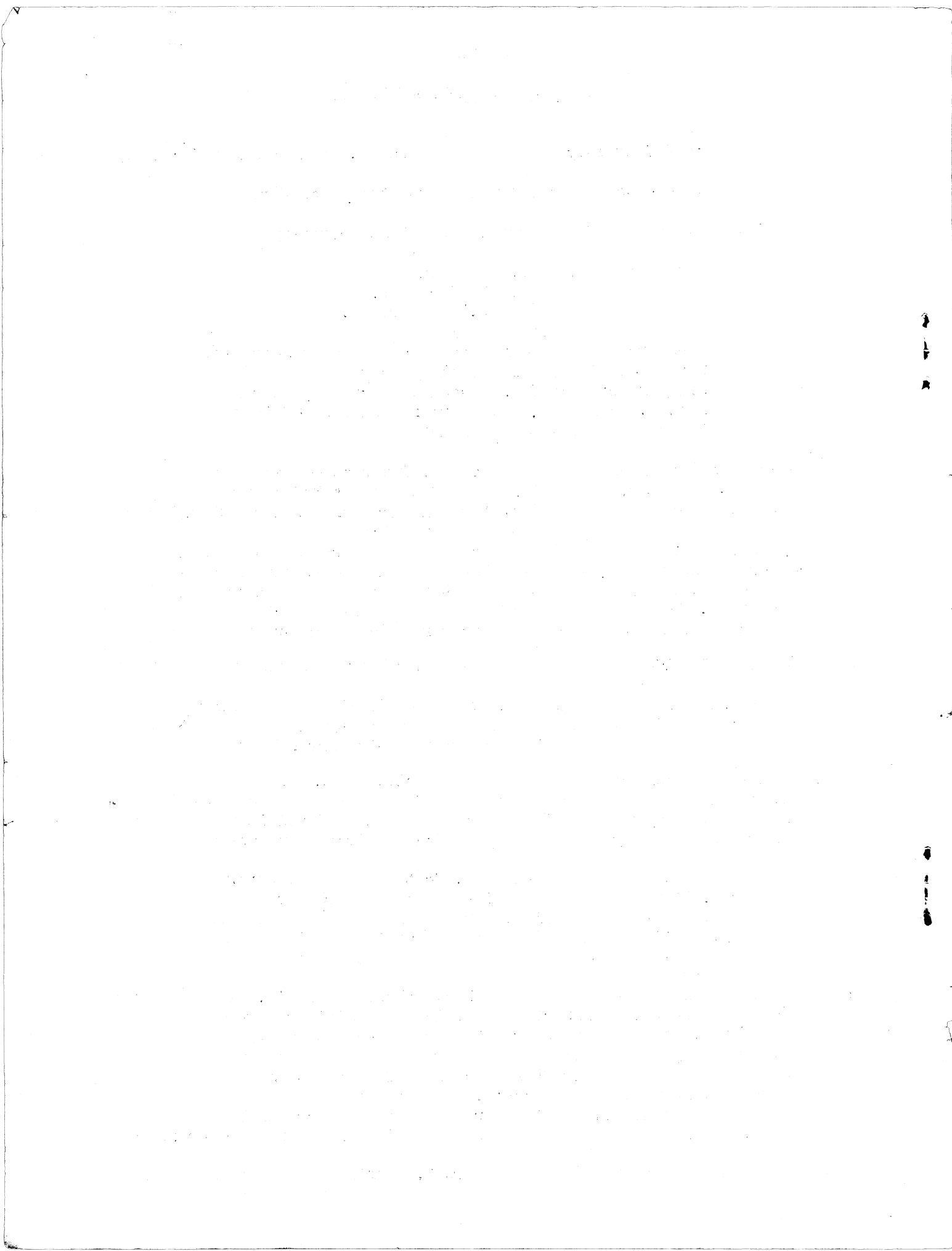
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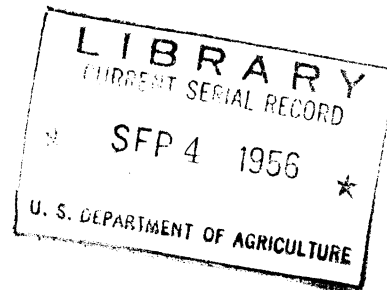
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UNITED STATES DEPARTMENT OF AGRICULTURE
Office of Information

SOME LANDMARKS OF DEPARTMENT OF AGRICULTURE HISTORY

(Condensed Version)

Excerpts herein are based on Agriculture History Series No. 2, as
issued by the Department Committee
on Agricultural History



May 1956

Abridged as USDA Document No. 8

1. The first part of the report is a general
description of the project and its objectives.

2. The second part of the report is a detailed
description of the methodology used in the study.

3. The third part of the report is a discussion
of the results of the study.

4. The fourth part of the report is a conclusion
and a list of references.

5. The fifth part of the report is a list of
references.

6. The sixth part of the report is a list of
references.

SOME LANDMARKS IN THE HISTORY OF THE DEPARTMENT OF AGRICULTURE

The United States Department of Agriculture grew directly out of the Patent Office which was established April 10, 1790. During the 1830's the newly reorganized Patent Office, then in the State Department, undertook to distribute seeds and collect agricultural statistics. Out of these activities developed the basis for a separate agency devoted exclusively to the interests of agriculture.

The first Patent Commissioner under this new law, Henry L. Ellsworth (1791-1858), was the son of the third Chief Justice of the United States Supreme Court, Oliver Ellsworth. He was born in Connecticut and graduated from Yale in 1810. Ellsworth practiced law, but he also farmed and was a leader in the Hartford County Agricultural Society. He became president of a large insurance company and was active in business and civic life. He resigned as mayor of Hartford in 1835 to become head of the Patent Office on June 15 of that year.

In his annual reports dated January 1, 1838 and 1840 respectively, he requested funds from congress to be used for collecting and distributing seeds and compiling agricultural statistics.

On May 15, 1862, President Abraham Lincoln signed the bill establishing what is now the United States Department of Agriculture as a separate agency with bureau status, headed by a commissioner of its own. On February 9, 1889 the Department was raised to Cabinet rank. Its supervising officer automatically became the Secretary of Agriculture.

At no time in its history could an observer survey the Department and show that it had sprung full-grown from the brow of the bureaucrat. A study of the Department's development reveals instead that its work was expanded by Congressional authorization at successive periods of the country's history, often because different groups of citizens demanded that something be done in the field of agriculture.

Emergencies, like those created by the rapid rise of technology, widespread animal or plant ills, insect infestations, dust storms, droughts, floods, the exploitation of forests, the necessity for better communication, or economic depressions compel the Government to take action in new fields.

There is nothing new about public aid to agriculture. For the farmer always battled the elements on a precarious basis, and far back in world history, before commercial farming became a reality, government had to aid him every now and then, if only to guarantee the food supply.

Organization and Study Lead to Changes

One of the first signs of the change in American agriculture was the establishment of agricultural and scientific societies by the so-called "gentlemen farmers." The Philadelphia Society for the Promotion of Agriculture was founded in 1785, and George Washington was elected an honorary member on July 4 that year. Washington consistently manifested great interest in agriculture and was often affectionately called "The Farmer of Mt. Vernon."

The suggestions made by Washington were favorably received by his Secretary of State and public men generally. So a committee of the House of Representatives recommended on January 11, 1797, that an agricultural board or society be created, that high Government officials be members ex-officio, and that it meet annually. The measure never came to a vote.

In 1819 the Secretary of the Treasury directed consuls to collect seeds, plants, and agricultural inventions for introduction into this country, although there was no appropriation for the purpose.

The agricultural societies were a chief means by which improvements were brought to the notice of farmers. In 1852 there were 300 active agricultural organizations, and by 1860 they numbered over a thousand. Closely related to

their spread was the rise of agricultural fairs and journals. Elkanah Watson held his first real agricultural fair in Pittsfield, Mass. on October 10, 1810, with 26 farmers participating. He then organized the Berkshire Agricultural Society to hold annual fairs, and thereafter fairs rapidly became institutionalized.

"The Agricultural Museum," believed to be the first farm journal in the country, was published in Georgetown, D. C., from 1810 to 1812 as the organ of the Columbian Society. Far more significant in its influence, however, was the "American Farmer" established at Baltimore in 1819 by John Skinner. Farm journals multiplied thereafter, appearing in every State, and all urged farmers to take up new and better methods of husbandry.

Congress also became aware of agriculture in this period, the House establishing a Committee on Agriculture in 1820 and the Senate one in 1825. In addition Congress in 1828 authorized the publication of a manual, prepared by Richard Rush, Secretary of the Treasury. It contained the best available information on the growth and manufacture of silk.

The development of the reaper, the steel plow, the threshing machine, and other implements around this time eventually produced great changes in agricultural technology and in the general economic and social organization as well. The farmer's investment in these machines made it essential for him to increase his income. Thus his dependence on the commercial market increased.

At the instance of Patent Commissioner Henry L. Ellsworth, President Van Buren in recommending that Congress widen the scope of the Sixth Census, induced that body on March 3, 1839 to permit the Patent Office to expend \$1,000 for the collection of agricultural statistics and for other agricultural purposes. It was natural in these early days that such work gravitate toward the Patent Office, for it was concerned with experimentation and the stimulation of enterprise and invention, and therefore with scientific progress in agriculture.

Governmental aid to agriculture was at last under way. The aid would progress from the increase to the regulation of production; from subsistence to commercial

agriculture; from self-reliance to considerable dependence on guidance by the Government; from the exploitation to the conservation of natural resources; from traditional guesswork to the application of practical scientific knowledge; from uncoordinated individual activity to well-coordinated group action through governmental aid, using the democratic process.

Every successive new function undertaken by the Department of Agriculture will be found outlined in an act of Congress. Hence the expression "The Department of Agriculture did so and so" could be interpreted as an abbreviated way of saying, "The Department of Agriculture, responding to public demand through the execution of work directed by an appropriate act of Congress authorizing this activity, did so and so."

Social and Economic Questions Attacked

At the turn of the century another group of problems appeared. They concerned social and economic questions associated with our decreasing farm exports and the ever-increasing use of agricultural technology. The farmer now needed assistance in his credit and marketing problems as well as in the formation and management of cooperatives. He required adult education in agricultural science which was provided by demonstration farms and later by the Extension Service.

World War I was a period of accelerated exports to Europe, speculative land values, greatly increased acreage in cultivation, and expanded use of Agricultural technology, with a great decrease in the number of horses and mules on farms. Thus millions of acres that had never been cultivated before were plowed up, while millions of other acres formerly used to pasture and grow feed for work animals became available for beef and dairy-herd production.

Return to Earlier Century

On July 4, 1836 when the Patent Office had become a separate bureau of the Government, it occupied rooms in ^{Blodgett's} Hotel, a three-story building on E. Street, Northwest. In December of 1836 this building burned to the ground and all the patent records along with it. Only in 1840 did the Patent Office get its new building on F. Street, Northwest, now occupied by the headquarters of the Civil Service Commission.

During 1836 and 1837 Ellsworth, at his own expense and without Congressional authorization, had distributed seeds and plants that he received gratuitously for the purpose. Soon the function of seed distribution was to be regularized under Congressional authority. For a long time it consumed most of the Federal funds allocated to agriculture. Ultimately it became almost a disgrace, as certain heads of the Department declared. Congressional seed distribution was not ended finally until June 30, 1923.

Ellsworth felt there was great room for expanding research by selection among wheat varieties, some of which yielded as much as 20 percent more than others. He reported experiments carried on during the preceding summer which had indicated that the Indian corn crop could be improved in yield one-third simply by due regard for seed selection.

Ellsworth's account for 1839 occupied but two printed pages. Herein he remarked that: "The ordinary expenses of the Patent Office the past year, including payments for the library and agricultural statistics, were \$20,799.95."

Congress exhausted itself by its 1839 appropriation, and no grant was made for agricultural purposes in 1840 or in 1841. In 1842 another \$1,000 was made available and this sum was doubled in both 1843 and 1844. It rose to \$3,000 in 1845, but nothing was granted in 1846 and agricultural work was interrupted. There were no lapses thereafter, however.

Commissioner Ellsworth's Reports are of special interest both because of his lively intelligence and of his urgent desire to aid agricultural. His last one, dated January 28, 1845 (he relinquished office on April 30 of that year,) covered activities during 1844 and comprised a book of 520 pages with index. The Commissioner began by citing the low rates of pay in his office.

The Commissioner also mentioned the "electric fluid" again which was now achieving all sorts of things since it had been "confined and tamed." The telegraph annihilated distance. "Paper H" in the book detailed how Professor Page had telegraphed 40 miles. Elsewhere was published a letter from Professor Morse to the Secretary of the Treasury reporting upon the telegraphic transmission of the proceedings at the Democratic National Convention in Baltimore during May 1844. Morse also suggested that the Government take over this new medium of communication and operate it as it did the postal service.

Agriculture Now a Major Study

The science of agriculture had now become a major study in the Patent Office. Abandoned and worn-out lands were being reclaimed. Guesswork and hereditary notions were yielding to scientific analysis and the application of scientific principles. Science however must always persevere. Some scientists had at first claimed that cornstalk sugar was grape sugar, whereas additional tests had proved it to be "equal to the best muscovado sugar." Ells worth felt sure that good sugar would soon be produced by this method on a large scale. It never was.

Edmund Burke became Commissioner of Patents May 4, 1845 and held office till April 30, 1849. During his term the "Report" was greatly expanded and included tables of British and American imports and exports as well as English cotton quotations. In 1846 agricultural statistics were omitted for lack of an appropriation, but in 1847 they reappeared. In 1849 the Patent Office was placed in the

new Department of the Interior. In December 1849, President Zachery Taylor recommended the establishment of a Bureau of Agriculture in the new Department. His message declared that governmental assistance to agriculture was totally inadequate. Congress took no action.

Thomas Ewbank (1792-1870.) reporting for 1849, addressed himself to President Millard Fillmore. Ewbank served as Patent Commissioner from May 19, 1849 until November 8, 1852. Born in Durham, England, he began as an apprentice in the sheet-metal trade. He came to this country in 1819 and was thereafter an inventor, manufacturer, and author. His primary interest was the industrial application of chemistry and physics.

At the direction of the Secretary of the Interior a "practical and scientific agriculturist" was hired to attend agricultural matters in the Patent Office and to prepare the separate agricultural "Report." Daniel Lee, M. D., was appointed. Ewbank omitted agricultural statistics from the volume because he said those hitherto published had been unreliable, and he therefore declined to "waste time and paper in printing crude guesses." He said that Congress or the State legislators should devise methods of getting good statistics worth printing.

Under date of February 28, 1853 Daniel Lee wrote on agricultural progress during the year, his main concern still being the conservation of our natural soil resources. He again accused the cities of seducing farmers into sending them their soil riches in the form of foods and breadstuffs. He said that no generation had the right to destroy the soil, a sentiment echoed by a few other farsighted men many years afterwards.

Lee also insisted that we should have agricultural schools to teach our young the principles of soil-building science. He urged Congress to take action. It was about 1849 that Jonathan Turner of Illinois began his campaign for industrial universities. This was part of the long struggle for popular and agricultural education which finally culminated in the passage of the Land-Grant College Act of 1862.

Continued Flow of Patent Office Reports

Silas H. Hodges, who acted as Patent Commissioner from November 8, 1852 to March 25, 1853, apologized for the inferior character of Lee's agricultural Report that year. R. C. Weightman was Acting Commissioner from March 25 to May 15, 1853. On the next day Charles Mason became Commissioner, and he held office till August 4, 1857. He made Daniel Jay Browne the editor of agricultural reports and specified that statistics were to be omitted until reliable ones were collected.

Charles Mason (1804-82) was born in New York, attended West Point, and then turned to law and journalism. He became Chief Justice of the Supreme Court of Iowa Territory. After his retirement as Patent Commissioner he was a patent lawyer in Washington, D. C. but subsequently entered politics in Iowa. The Reports during his term of office contained fewer letters from correspondents and more learned essays of substantial character by writers like Joseph Henry and other distinguished men.

Samuel T. Shugert was in charge of the Patent Office until Joseph Holt (1807-94) became Commissioner, September 10, 1857 to March 14, 1859. Holt, a rather remarkable man was born in Kentucky. Buchanan appointed him Patent Commissioner for his aid in a great Democratic victory. He became Postmaster General of the United States in 1859 and was later the first Judge Advocate General and had much to do with the development of our military law and the supervision of court martial

At this time various groups were agitating for agricultural colleges, free land, and more Federal aid for farmers. If Congress would not appropriate money for the colleges at least it should make provision for them in the form of public land grants. Both movements hit upon the consistent opposition of the southern delegation to Congress which sincerely believed that the doctrine of States rights forbade any such Federal aids. One land-grant college bill did get through Congress during Buchanan's administration, but the President vetoed it because he thought that Federal grants to States were not only extravagant but unconstitutional.

William Darius Bishop (1827-1904,) born in New Jersey, and a former railroad official and member of Congress, was made Commissioner of Patents by President Buchanan March 23, 1859 and served until February 15, 1860, when he went back to railroading and politics. He was followed in office the next day by Philip F. Thomas. Thomas resigned December 13, 1860 without issuing a Report. The 1860 publication was edited by the "Superintendent of the Agricultural Division," Thomas G. Clemson, and from December 14, 1860 to March 28, 1861, S. T. Shugert was again Acting Commissioner.

It was maintained that the United States now needed much more than a mere Agricultural Division in the Patent Office. It now spent \$53,000 a year, had a superintendent, four clerks (including translators and writers,) a curator or gardener, and some aides for the latter.

Increased Recognition Urged

The Report for 1861 was issued in 1862 by the new Commissioner of Patents, David P. Holloway. It was the most complete agricultural manual so far issued by the Patent Office, but it contained no statistics other than a few on milk production. It consisted in the main of essays on the current progress of American Agriculture. There was less material extracted from journals, newspapers, and books. Holloway was appointed March 28, 1861 and served till August 16, 1865, after agriculture had left the Patent Office.

Holloway launched a prolonged and fervent plea for the establishment of an institution to serve agriculture in this country where three-fourths of the citizens were still farmers. He undoubtedly reflected a rising tide of public opinion or he would not have written as he did.

The United States Agricultural Society had been organized in 1852, and it ultimately became the most powerful force urging the establishment of a Federal

Department of Agriculture. A National Convention of Agriculturalists was called to meet in Washington June 24-25, 1852, and the agricultural society was formed as a result. A hundred and fifty delegates were present and Marshall P. Wilder was elected the society's president.

The organization rapidly drew into its membership the leading farmers of the Nation, and its journal was highly regarded and powerful. From the outset it urgently sought public assistance for farmers, and at each meeting it urged the establishment of a Department of Agriculture with a Cabinet officer at its head.

The United States Agricultural Society kept up continual pressure, especially through Charles B. Calvert of Maryland, its member, who was elected to Congress July 4, 1861 and placed on the Committee on Agriculture. Calvert worked for a department, not a bureau, though there was much hostility toward the idea of another Cabinet office being established. It was at one time suggested that the head of the department be elected by the farmers. Meanwhile Morrill was making headway on his land-grant college bill.

In 1859 an Advisory Board of Agriculturist met at the request of the House Committee on Agriculture and after discussion made a report recommending the creation of a Department of Agriculture with a Cabinet officer at its head. This report was suppressed though its main recommendation became known.

Should the new agency be a department or merely a bureau as Lincoln had suggested? Ultimately the House Committee on Agriculture decided in favor of a department in charge of a commissioner, and in such form the bill was finally enacted. It was felt that commercial and manufacturing interests were local in nature so they were omitted from consideration. It was stated they could easily combine among themselves and make their wants felt by the Government, while "Agriculture clad in homespun is very apt to be elbowed aside by capital."

Far-~~Reaching~~ Agricultural Legislation Enacted in 1862

The fact that the Southern delegation no longer sat in Congress naturally facilitated the passage of the bill, because their passion for States rights might well have defeated it. President Lincoln signed the bill May 15, 1862 and it became law. On May 20, he signed the Homestead Act which made provision for apportioning freehold farms of 160 acres each from the public domain to citizens who would make homes on them and till them for 5 years. Then on July 2, 1862 Lincoln approved the Land-Grant College Act fathered by Senator Justin Smith Morrill of Vermont.

The last-named law endowed the colleges with 11,000,000 acres of public land, nearly twice the area of Vermont. The States were authorized to sell the land and use the proceeds to endow their respective agricultural colleges. The States were thereafter to operate the colleges themselves. The law is important constitutionally as marking a beginning of Federal grants-in-aid to the States.

Meanwhile the Department of Agriculture had its origin in the office of Commissioner of Patents Holloway, July 1, 1862, and Isaac Newton (1800-1867,) who ~~since early 1861~~ had been in charge of the Agricultural Division, became the first Commissioner of Agriculture. It is of interest to observe that public farm aid was not a nationally pulse-quickenning subject in those days, and in the main the gentleman farmers led the agitation for the establishment of the Department.

There was considerable political inertia on the subject, and rural America largely held to the Jeffersonian maxim that the best was the least government. Senator Hale in discussing the proposed department in fact said that the prevailing farmer attitude was: "For Gos's sake let us alone!" There was no compact farm bloc, and professional consultants were not in agreement as to procedure.

The Department had mainly concerned itself with distributing seed, and largely lost the respect of agricultural scientists and journals. It did not appeal to

the actual soil cultivator or dirt farmer for many years. The Nation made no effort for sound land settlement or to control land speculation and exploitation. As a matter of fact no controls were lodged in the new Department. Food was needed for the Civil War, so an unnatural extension of farm-crop belts took place and new machinery was widely utilized. Economists of the day took the farmer for granted or ignored him.

The act establishing the Department of Agriculture in its preamble reads thus:

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, - That there is hereby established at the seat of Government of the United States a Department of Agriculture, the general designs and duties of which shall be to acquire and to diffuse among the people of the United States useful information on subjects connected with agriculture in the most general and comprehensive sense of that word, and to procure, propagate, and distribute among the people new and valuable seeds and plants.

The original act offers no evidence that any balanced social and economic program for agriculture was desired or much less visualized, at the time. Yet the law was very broad in scope. It gave the Department great latitude and discretion. Meanwhile it would appear that the Department has had ample legal authority for most of its subsequent activities. It is also of interest that the act prescribed the appointment of professionally qualified employees.

Isaac Newton, the first Commissioner of Agriculture, was born in New Jersey but grew up in Pennsylvania. He served from July 1, 1862 until his death in office on June 19, 1867. He was a Quaker of farmer stock and limited formal education. When he grew to maturity he managed two large farms in Delaware County, Pennsylvania, so well that they became celebrated as models. He became an active member of the Pennsylvania State Agricultural Society. In 1854 he purchased a thousand acres of land in Prince William County, Virginia, but the outbreak of the Civil War rendered this venture unsuccessful.

Newton was personally acquainted with Lincoln. One story has it that he delivered milk to the White House. Lincoln placed him successively in charge of agricultural work in the Patent Office and in the Department of Agriculture.

Early in 1863 Newton reported for the first time to President Lincoln. He began by quoting and discussing the organic act of his Department. He also reported that between July 1, 1862 and January 1, 1863 he had expended the sum of \$34,342.27, leaving an unexpended balance of his appropriation of \$25,657.73. He asked Congress to grant him \$130,000 for the fiscal year to end June 30, 1864, "~~which is deemed~~ a low estimate."

Objectives of Department Take Shape

The earliest bound volume of Department of Agriculture publications now in the Department Library begins with a circular from the Commissioner himself on the "Present Agricultural, Mineral, and Manufacturing Condition and Resources of the United States," dated 1862. Next there is a "Catalogue of the Plants, Bulbs, Tubers, for Distribution from the U. S. Propagating Garden," with a report on the "Objects and Aims of the Garden" by its superintendent, William Saunders, dated the same year. Then follows the "Report on the Chemical Analysis of Grapes," by Chemist Charles M. Wetherill, who concluded that our wine grapes were as good as those of Europe. The Commissioner's report for 1863 contained meteorological data supplied by Joseph Henry of the Smithsonian Institution.

Newton mentioned buildings, but not until 1867 did Congress appropriate \$100,000 for building at 12th and B. Streets, Southwest. A stable was erected in 1879, and \$25,000 was appropriated to put up a building for the Seeds Division and the Division of Statistics in 1881. A green-house was erected in 1883,-- no more new buildings until 1897.

The Commissioner recommended the founding of a library. One had been

started in the Patent Office in 1840 when a clerk was appointed to gather statistics and useful agricultural material. In 1869 the Department got these books and added them to its own inadequate library. This occupied the entire west end of the first floor of the new Department building. J. B. Russell, the first librarian, was appointed in 1871.

Jacob R. Dodge, who was appointed statistician in 1866, was distinguished in his specialty, and served the Department well for 24 years. Statistics were long regarded as almost a divine revelation and as constituting the physics and physiology of society. Investors and speculators spent huge sums to obtain figures from which to predict market fluctuations. They thought that reliable crop information would set the farmer right up in the world; and that he could foil speculators by withholding his crops from market till the right time. It was a beautiful theory but did not work, partly because too few farmers fully understood the implications of the statistics provided for them.

During the war there had been an era of prosperity in some areas. The Corn Belt had begun to be stabilized in the present area. Wisconsin and Illinois were still the chief wheat-producing States, but the Wheat Belt began to move generally across the Mississippi. The Cotton Belt had also begun to move westward, away from the exhausted lands of the Southeast.

On November 27, 1865 Commissioner Newton reported to President Johnson for 1865. It was a time for world expansion. Some departmental scientists had been sent to Europe and Asia to make observations, and they traveled very economically. In fact ^{Townsend} / Glover had attended the entomological exhibit in Paris at a cost of only \$500.

Chief Clerk John W. Stokes was Acting Commissioner from June 20, 1866 until December 4, 1867 when Horace Capron (1804-85) was appointed Commissioner. Capron was born in Massachusetts, but grew up in New York. In 1836 he erected a cotton mill at Laurel, Maryland, which he later made into a model factory. Upon his resignation as Commissioner June 27, 1871 he went abroad to become agricultural

adviser to the Japanese Government.

Commissioner Capron manifested considerable interest in steam plowing and reported 3,000 steam plows at work in England and only 2 in the United States. Later in the book appeared a 10-page article on the "History of American Inventions for Cultivation by Steam." It was written by a patent examiner and well illustrated. The new Commissioner said he had reorganized the Department, making drastic changes. At this time, January 13, 1868, the Department had about 47 employees.

In 1868 Commissioner Capron could report to President Johnson that the new building was at last completed. It was of Renaissance architecture, 3 stories high, and 170 by 61 feet. Its steam-heating apparatus was reported to be in successful operation. Including furniture and laboratory equipment it had cost \$140,420. Reporting to President Grant for 1870 Commissioner Capron again protested the insufficient remuneration of his staff and asked much larger appropriations. He reported expenditures of \$169,175.24.

President Grant appointed Frederick Watts (1801-89) to succeed General Capron and he took office August 1, 1871. Watts was born in Pennsylvania of Welsh extraction. He grew up on a farm and acquired a taste for and interest in farming. He studied law and was president of the Cumberland Valley Railroad Company from 1845 to 1871, but he had meanwhile engaged in scientific farming. Watts had experimented with various types of farm buildings and had organized farm societies. He was the first head of the Department to give attention to our timber supply. His reports are dated from 1871 to 1876.

Watts appointed the statistician, J. R. Dodge, to serve also as editor and the latter complained that it was very difficult to get properly qualified persons to compile and edit agricultural reports. The compensation, \$1,200 to \$1,800 a year, was insufficient to attract workers with broad agricultural experience and high literary attainments.

In 1872 the Department had an appropriation of \$197,070 of which all but

\$1,278.82 was expended, but that was said to be sufficient to cover outstanding bills and still leave a small margin for return to the Treasury. In 1873 the Commissioner spoke of the increasing importance of entomology, and noted the cost and extent of insect damage.

Chemist William McMurtrie, was devoting his time to agricultural products. Watts had been annoyed by private individuals who wanted the departmental chemist to test wine, patent medicines, and mine samples for them, and even to give them certificates of merit. Since there had been loud complaints about frauds in commercial fertilizers the chemist was told to analyze some of them and publish the results.

In 1872 when James M. Swank wrote his brief account of the Department's history and development, J. R. Dodge was statistician, William Saunders the superintendent of gardens, Townsend Glover entomologist, Ryland T. Brown chemist, George Vasey botanist, J. R. Russell librarian, and Andrew Glass superintendent of the seed room. The Department had 50 clerks and specialists and 50 messengers, laborers, and other employees.

President Hayes appointed William G. LeDuc (1823-1917) Commissioner of Agriculture on July 1, 1877. The latter was born in Ohio, the son of a French father who had come to the United States to help the colonists in the Revolutionary War. LeDuc had studied law, been admitted to the bar, and had become active in and around St. Paul in the development of the farm country. He served in the Union army and later entered railroading. As Commissioner he established a tea farm and was greatly interested in sugar beets, sorghum, and animal diseases, the last interest culminating in the Bureau of Animal Industry.

Commissioner LeDuc's first Annual Report was for 1877. In it he presented a table to show that the Department of Agriculture received small appropriations as compared with other Federal Government agencies.

In 1879 a Veterinary Division was established to carry out fully the work on animal diseases. Congress had also appropriated \$10,000 for study of the history

and habits of insects. Veterinarians contributed long articles on animal diseases in this 1879 volume. The last report submitted by LeDuc was that for 1880.

LeDuc also wrote that the departmental employees received lower pay than those doing similar work in other Departments. His distinguished chemist received only \$2,000 a year (when he got it) for his "laborious and valuable" services, whereas a chemist who worked a short while detecting fraud in sugar for the Treasury Department received four times that much.

Dr. George B. Loring (1817-91,) of Massachusetts, educated as a physician, but also a scientific farmer and a Victorian-type political orator, was appointed Commissioner of Agriculture by President Garfield, July 1, 1881. Loring had operated a stock farm and had done much to further agriculture throughout his life.

Loring's first volume bears the dates 1881 and 1882. D. E. Salmon, later to be first chief of the Bureau of Animal Industry, and already a distinguished scientist, was in charge of the Veterinary Division. Reports were printed by several veterinarians regarding contagious pleuropneumonia, and agitation was rife for Federal action.

Organization and Growth in 1883 and After

In 1883 the Department consisted of the Division of Gardens and Grounds; the Botanical Division; the Microscopic Division; the Chemical Division; the Entomological Division; the Division of Statistics; the Veterinary Division; the Forestry Division; and the Seed Division.

Not many years later Theobald Smith, F. L. Kilborne, and Cooper Curtice solved the cattle-tick fever puzzle in the Bureau of Animal Industry by proving that the tick was the transmitting agent. This was a fundamental medical discovery of far-reaching importance.

The first report of the Bureau of Animal Industry was in the main devoted to

contagious pleuropneumonia and cattle-tick or southern cattle fever. The bill creating the Bureau was introduced by William H. Hatch of Missouri. Its passage marked a notable extension in the interpretation of the general-welfare clause of the Constitution. Here was a problem that actually transcended the capacities of the States, and individual freedom had to be restricted by the Federal Government for the public welfare.

The Bureau stamped out contagious pleuropneumonia in 5 years, a world record for its control and a tremendous boon for livestock men. The Bureau thereafter performed a long line of outstanding scientific research on hog cholera, hookworm, bovine tuberculosis, anthrax, blackleg, cattle-tick fever, contagious abortion, and many other animal and fowl diseases.

We come now to the last Commissioner of Agriculture who was also the first Secretary of Agriculture, Norman J. Colman (1827-1911) of Missouri. He was appointed by President Cleveland to take office April 3, 1885, and his first Report is dated that year. Colman was born in New York; taught school, studied law, and fought in the Civil War. After the war he started "Colman's Rural World" in St. Louis. He was elected to the Missouri State legislature and manifested much interest in the State university and served in many agricultural organization.

Colman was appointed because of his broad knowledge of agricultural problems and was almost certainly the most competent head the Department had up to that time. He was largely instrumental in effecting the passage of the Hatch Act which founded the State agricultural experiment stations and gave the Department its second Bureau, the Office of Experiment Stations.

Largely through Colman's interest a meeting was held in 1883 to consider the establishment of State experiment stations with Federal aid and a permanent organization was effected at the third meeting in 1887 - the Association of American Agricultural Colleges and Experiment Stations. The agricultural societies, especially the Grange and similar agencies, clamored for action. On March 2, 1887 the Hatch Bill was passed establishing the first national system of agricultural

experiment stations in the world and setting up the Office of Experiment Stations in the Department of Agriculture to coordinate their efforts. This authorization of combined Federal and State work naturally required some departmental reorganization.

W. O. Atwater was made Chief of the Office of Experiment Stations and A. C. True was associated with him.

The Department had received scant praise in its career so far. The farmers could not well apply the knowledge they had received in the form in which they received it. That was a gap which the Extension Service filled a decade or so later. Congress must give the Department scope for educational, economic, and social as well as scientific functions.

Emphatic Agitation for Cabinet Rank

The 50th Congress (December 5, 1887 - March 3, 1889) was simply deluged with petitions and memorials asking that the Department be given Cabinet rank. This was not altogether new agitation; it had gone on periodically for 30 years. Bills had even been introduced and occasionally passed by the House of Representatives to give The Department cabinet rank. Finally the Hatch Bill was passed and signed. Commissioner Colman was nominated and on February 13 confirmed as the first Secretary of Agriculture. The sources of lawmaking are ^{very} clear in this instance. Congress created the Department of Agriculture because of the hard effort, ceaseless agitation, and widespread expression of views by those who favored such legislation.

Colman left office with Cleveland. The incoming President Harrison appointed Jeremiah M. Rusk (1830-93,) and he assumed office on March 7, 1889. Rusk had been born on a farm in Ohio, but in 1853 he went to Wisconsin to keep a tavern. This venture was a success so he started a stage line which was also profitable, and in time he became Governor of Wisconsin. His period as Secretary of Agriculture was

marked by the eradication of destructive cattle diseases, and the passage of legislation for the inspection of meat. Rusk's particular contribution was his recognition of the importance of publicity and his ability to engage the interest of the press in departmental activities.

Secretary Rusk promptly reorganized the Department. He retained direction of the executive work himself and placed the scientific work under the first Assistant Secretary provided by Congress, who was Edwin Willets. He set up a Division of Records and Editing and urged the frequent publication of the results of scientific work in clear language that practical farmers could readily understand. The publication of Farmers' Bulletins therefore began. Rusk also began a systematic investigation of foreign markets for American farm products. He indicated that our farm exports were not so profitable as they once were.

The Department of Agriculture consisted of the following branches in 1889: Division of Statistics; Division of Entomology; Division of Chemistry; Section of Silk Culture; Botanical Division; Section of Vegetable Pathology; Division of Economic Ornithology and Mammalogy; Division of Microscopy; Office of Experiment Stations; Forestry Division; Division of Gardens, Grounds, and Horticulture; Seed Division; Division of Pomology; Folding Room Library; Museum; Bureau of Animal Industry.

In 1891 the Weather Bureau became the Department's third unit of bureau status. It had been transferred from the War Department, because the public considered that civilian control would make it more useful to agriculture and commerce. Since the Department had long carried on meteorological work the transfer was appropriate.

Cleveland, returning to the Presidency, appointed J. Sterling Morton (1832-1902) Secretary of Agriculture. He assumed his post March 7, 1893. He was born in New York and enjoyed the "distinction" of having been expelled from the University of Michigan for his independence. He had located in Nebraska City where he became a politician and editor of a newspaper. Morton had long been a student of agriculture, and had owned and worked a Nebraska quarter-section. He had a passion for

tree planting and became the founder of Arbor Day. As Secretary he emphasized economy and so objected to free seed distribution that he actually put a stop to it at one time.

Reporting for 1893, the secretary advocated better departmental organization and gave some information about foreign agricultural departments. He said that the classified civil service was defective because there was too much injustice in rank and pay. Secretary Morton commented that the act creating the Department had provided it with no building. The main structure erected in 1867 to accomodate 50 people in 4 divisions was now far too small.

The formation of the Dairy Division and its initial operation were described in Morton's 1895 Report. Henry E. Alvord was its first chief. Civil Service status had been extended to the Department's 2,019 employees by Presidential order dated May 24, 1895, which included all of them except the Presidential employees and common laborers. The Department now had 429 female employees.

In his final statement, that for 1896, Morton recorded that the Department's annual appropriation was \$2,583,750.

The Secretary consistently operated the Department economically and turned money back to the Treasury. He was very hostile to seed distribution and insisted it be abolished, and had actually tried to stop seed distribution by injunction. Seeds to the amount of two million dollars in retail ^{value} had been sent out in competition with those sold by retail seedsmen. Later the seedsmen were given the business of making the distribution themselves which mollified them.

The Secretary gave the average age of the chief of his scientific bureaus as 42 years and 3 months, the oldest being 51 and the youngest 29. He said that their salaries of \$2,500 and the \$1,800 paid their first assistants were insufficient. Even the directors of the State experiment stations received more. Turn-over was high because the scientific staff was underpaid..

At this point Secretary Morton left office and James Wilson of Iowa was appointed his successor by President McKinley, taking office March 7, 1897.

Secretary Wilson (1836-1920) was born in Ayrshire, Scotland; he came to the United States in 1851 and chose farming as his life work. He early became a community leader in Tama County, Iowa, was elected to the legislature, and also served three terms in Congress. In 1891 he was made professor of agriculture and head of the experiment station in Iowa State College. Henry Wallace, father of Henry C. and grandfather of Henry A., suggested his name to President McKinley for Secretary of Agriculture. Wilson continued in office for 16 years, remaining under Presidents Theodore Roosevelt and William H. Taft.

Turn of Century Sees Great Advancement

Farm demonstration and cooperative extension work were undertaken during Secretary Wilson's term and a small army of experts and scientists was employed. The Department grew into a magnificent research regulatory, educational and custodial institution, each manifestation of growth representing an effort to provide the services demanded by the public and authorized by Congress. Not only did research in the natural sciences attain very high quality under Secretary Wilson, but social and economic studies advanced rapidly.

While James Wilson held office urban influences on rural life rapidly intensified. Means of transportation and communication vastly improved. The increasing manufacture of automobiles and the improvement of roads gave farmers new access to markets. Competition grew keener and farm credit became an acute problem. The numbers of people engaged in farming grew steadily less. In 1910, only 32.2 percent of all persons gainfully employed were in agriculture, and the estimated average equity of farm operators in the land they tilled was 50 percent.

In his report for 1899 Wilson started the custom of beginning with brief items summarizing the year's outstanding accomplishments. Atwater now had a flow of nutrition bulletins appearing, and Wiley reported on food preservatives. N. E.

Hansen, M. A. Carleton, Water T. Swingle, and David Fairchild were mentioned as plant explorers.

At the turn of the century in 1900 Secretary Wilson expressed his determination of bringing scientists to the aid of farm producers, and to this end 21,000, 000 copies of departmental publications had been distributed.

In 1901 the Secretary effected the long-needed reorganization of related departmental units into bureaus. The Bureaus of Plant Industry, Chemistry, Forestry, and Soils were created with chiefs at \$5,000 each. B. T. Galloway became the first head of the Bureau of Plant Industry and Harvey W. Wiley headed the Bureau of Chemistry. Milton Whitney became chief of the Bureau of Soils which took over all work on soil curves, soil analysis, soil technology, and drainage investigations. Gifford Pinchot was made Forester.

Farm Demonstration Experiments Begin

In the report for 1902 we find first mention of the farm-demonstration experiments undertaken to show the value of using scientific cultivation methods on selected "demonstration" farms in various communities. This novel and important idea originated with Seaman A. Knapp of the Bureau of Plant Industry. Ultimately the Extension Service was organized to carry adult education in agriculture right to farmers on their own farms. At that time, though, agricultural editors and farmers' institutes were pioneering in this work that later became an organized governmental activity.

The appearance of the cotton boll weevil speeded Dr. Knapp's farm-demonstration work, as the weevil produced a crisis in cotton production. Texas especially appealed loudly for Federal aid. At one huge mass meeting in Dallas half a million dollars was demanded to fight the weevil. The farm-demonstration method proved an

ideal means of instruction. Dr. Knapp also won praise for the 250,000 acres of rice growing in Texas from varieties he had introduced.

In 1904 Secretary Wilson made reference to farmers as our greatest source of natural wealth and said that well-being was generally diffused among them. The Bureau of Entomology with L. O. Howard at its head had been established in accord with recommendations made the year before. It was aiding the rapid spread of farm-demonstration work to cope with the boll weevil. The Weather Bureau announced that it would interpret "the language of the sun" at Mt. Weather.

On February 1, 1905 custody of the national forests was transferred to the Department and fused with its Bureau of Forestry to form the Forest Service. The Bureau of Chemistry reported that it had lost many employees due to the low salaries paid. It was studying food poisons and standards and cooperating with the Postoffice Department in protecting the mails from makers of fake remedies. The Bureau of Statistics had considerably improved its crop reporting, and the Office of Road Inquiry became the Office of Public Roads.

In 1906 the Department reported an annual appropriation of \$7,175,690. There were 1,594 employees in Washington and 4,648 in the field. The new East and West Wings of the present Administration Building were nearly complete but by no means large enough.

Dr. Wiley had helped in effecting the passage of his Food and Drug Law on June 30, 1906 and the Bureau of Chemistry was charged with its enforcement. A force of chemists and inspectors had to be appointed, and before long the number of employees in the Bureau of Chemistry was doubled.

Agricultural science had enormously increased production, but this increase was accompanied by a reduction in farm exports and a diminishing rate of population growth. However, farmers could always provide sufficient food for our population, so the Secretary seemed satisfied with conditions. He praised farmer cooperatives as well as the rapid extension of the Farmers Cooperative Demonstration Work.

Country Life Commission a Landmark

President Theodore Roosevelt appointed his Country Life Commission in 1908. The Commission held 30 hearing throughout the nation. In various ways it sought aid from over 100,000 persons. Dr. L. H. Bailey of New York was its chairman. The other members were Henry Wallace of Iowa; Walter Hines Page, who later became war-time ambassador to Great Britain; Gifford Pinchot, the great Forester and later Governor of Pennsylvania; and Dr. Kenyon L. Butterfield of Massachusetts Agricultural College.

The Commission held that a new race of teachers should appear in the country and that a new rural clergy be trained. It suggested increased farmer cooperation, the promotion of rural social advantages, and the expanding of efforts to make country life more "gainful" and more rewarding. It recommended that inventory be taken of our rural resources from the soil up, that a united campaign be instituted for rural progress, and that the extension work be organized on a national basis through the State colleges of agriculture.

It was in 1908 as well that serious study of farm economics was undertaken in the Bureau of Plant Industry with W. A. Peek in charge. The subjects of investigation were farm accounts, farm records, and the economic value of using farm equipment.

By this time the Department was enforcing food, game, drug, bird, livestock, quarantine, and meat-inspection laws, and many others besides. Its work had to expand constantly, as Congress passed new laws and charged the Department with their enforcement.

Farm cooperative demonstration work was widespread now seven years after its inception, and farm children also were being organized in clubs. Farm economic studies continued in the Bureau of Plant Industry where "farm problem or extension work" began. Trained men were being sent out as teachers. W. J. Spillman

spread this farm demonstration work to the North and West; in 1911 he helped establish the first Farm Bureau. Bradford Knapp, son of Seaman A., carried on the farm cooperative demonstration work in the South.

Dynamic Era in The Department

It may truthfully be said that when Secretary Wilson left office with President Taft, a definite era in the history of the Department of Agriculture ended. The incoming President Woodrow Wilson appointed the historian, economist, financier, and former college president, David F. Houston, Secretary of Agriculture. The appointment was an appropriate one at this juncture of the Nation's agricultural affairs. Secretary Houston had received a master's degree in government at Harvard. He taught at the University of Texas after which he became president of the land-grant college of that State.

In general it may be said that Secretary Houston ushered in a period when the Department devoted much more attention than before to broad social and economic issues affecting farmers. As he said in his report for 1913: "We have unmistakably reached the period where we must think and plan." Nevertheless study of the evolution of agricultural policies indicates marked continuity throughout. When changes occur the new will be found to have its roots fixed firmly in the old--in some research or fact finding investigation that went on much earlier.

Houston realized that farm-management studies could no longer be carried on effectively in the frame of reference of the Bureau of Plant Industry. He recognized the great importance of the extension work and understood that it should function more independently. He asked and acted upon the advice of such men as Thomas N. Carver of Harvard, George F. Warren of Cornell, Andrew Boss of Minnesota, H. C. Taylor of Wisconsin, James A. Foord of Massachusetts Agricultural College, John I. Falconer of Ohio State, and Richard L. Adams of the University of Cali-

formia. He inaugurated the "New Freedom" period which actually extended to the death of Henry C. Wallace.

Finally Secretary Houston saw the necessity for greater centralization within the Department and set up a number of staff agencies to effect integration. Originally the Department consisted largely of independent research sections and divisions which generally pursued thier own ways.

In response to long-continued agitation and in recognitions of the new emphasis on distribution in agriculture, Congress had provided for specifically, in its appropriation for 1913-14, the acquiring and diffusing among the people, useful information on subjects connected with the marketing and distribution of farm products, and made \$10,000 immediately available. To carry out the intention of Congress Secretary Houston established the Office of Markets, attached directly to his office. Under the leadership of Charles J. Brand it rapidly became one of the spearheads in the vigorous attack on economic and social problems.

In 1914 the Office of Markets was assuming much enhanced importance. The Cotton Futures Act has been passed. Studies of rural credit were under way and better dissemination of information has been effected. The Smith-Lever Agricultural Extension Act was passed on May 8, 1914, and the Extension Service was being organized to carry out its provisions. It provided for the use of personal-contact teaching methods to be financed by the grants-in-aid. Formal agreements between the Department and the land-grant colleges had to be effected. The Office of Information was created.

By 1916 work on marketing, finance, and rural organization mapped in earlier reports, was well under way. Acts establishing standards for staple agricultural products shipped to market, as well as the grain futures, grain standards, warehousing, and Federal farm-loan and Federal-aid road laws had all been passed. The loan act was especially designed to create a banking system tailored to rural needs.

World War Brings Drastic Changes

By 1917 Houston was stressing all efforts to increase farm production for domestic use and export. The Food Administration was started with Herbert Hoover in charge. The cooperative Extension Service sprang into new usefulness in showing farmers how to increase food production to win the war. An additional appropriation of over 4 million dollars was made to expand this work. Farmers responded vigorously, struck the plow into land hitherto untilled, and won praise for it. Home economics work, Federal and State, increased in importance under impact of war conditions.

A record acreage had been planted by 1918 and crop yields had been stimulated in all practicable ways. Every agency was pushing this work. Authority was now granted to use motion pictures for purposes of agricultural education. Interest in farm land increased, land speculation got under way, and farm values shot up miraculously, tempting farmers to top-heavy mortgage indebtedness.

The day following Secretary Houston's resignation to become Secretary of the Treasury, February 2, 1920, Edwin T. Meredith, an Iowa Farm Editor, became Secretary of Agriculture. The latter served until March 4, 1921 and made the report for 1920, in which the farmers were still being praised for glorious wartime service. But Secretary Meredith advised farmers that they now faced a declining market, with shrinkage of land and other values, and the Secretary admitted that there was no simple solution for this complex problem. World conditions were chaotic.

In 1922 President Harding called an agricultural conference in Washington; the Grain Futures Act was also passed this year. The surplus became the chief agricultural problem; it was at first attacked as a marketing, and later as a marketing and production problem.

On March 5, 1921 President Harding appointed Henry C. Wallace, father of Henry A. Wallace, to be Secretary of Agriculture. In his first report, for 1921, Wallace

frankly recognized the dangerous nature of the farmer's position with overexpanded acreage, inflated land values and an uncertain foreign market confronting him, and an industrial depression under way. The farmer was said to produce on faith and take great risks, and his 1920 crops were produced at the greatest cost known.

Marketing was now seen to be an integral part of production, though scientific research was still regarded as basic, and a Director of Scientific Work was appointed. Henry C. Taylor became chief of the new Bureau of Agricultural Economics on July 1, 1922. Work in home economics was also still increasing in importance. Wallace warned that no new land should be opened to cultivation and recommended intensive, cost-lowering methods to farmers.

Secretary Wallace died in office October 25, 1924, and Assistant Secretary Howard M. Gore immediately became Acting Secretary. He was appointed Secretary of Agriculture November 22, 1924, and served until March 4, 1925 when he resigned to become Governor of West Virginia. The 1924 volume was prepared under the direction of Secretary Wallace; Gore transmitted it as Acting Secretary.

The Bureau of Dairying was established by act of Congress of May 29, 1924. The dairy industry had asked for the establishment of a bureau to consolidate work in this field.

It almost seemed as if the departmental research workers had overreached themselves. Set to lowering the unit costs of agricultural production and to improving yields, they had succeeded so admirably as to aid in producing enormous surpluses.

Only 21.5 percent of all our people gainfully employed were engaged in agriculture in 1930 and the estimated average equity of farm operators in the land they farmed was only 41 percent. The latter figure dropped to 39 percent 5 years later. The agricultural export market suffered increasingly serious competition; the day of loans to Europe had passed, and our own tariff walls not only effectively shut out foreign goods but stimulated similar action on the part of other nations. The

highly protective Hawley-Smoot Tariff Act was passed in 1930.

Industrial Prosperity Masks Real Conditions

On March 5, 1925, William M. Jardine, President of the Kansas State College of Agriculture, took office as Secretary of Agriculture and served until March 4, 1929. During his term ominous conditions in agriculture were somewhat masked by the spurious and highly specialized industrial and financial "prosperity."

Agricultural exports were said to have increased. The farm-credit situation was regarded as bad, the small farmer suffered, and local agricultural credit organizations were suggested as a remedy. In some regions it was held there was actually lack of confidence in future expansion.

Agricultural pressure groups also recommended the passage of laws to authorize the setting up of agricultural credit corporations and for expanding livestock grazing rights in national forests. Investigations were already under way on high freight rates and farm taxes, and it was insisted that the tax load must be in part removed from farm property. The Department also saw that it must aid in the business organization, management, and operation of farm cooperatives, as well as the education of farmers in regard to them.

In 1927 the farm problem was still acute. The Secretary suggested that wastes be cut, production costs diminished, the margin between producer's cost and consumer's purchasing price lessened, the costs of transportation and distribution reduced, the tax burden redistributed to help reduce the farmer's overhead, and that farmers cooperate to enhance their bargaining power. What should be done was clear clearly seen; how to do it remained puzzling.

Cooperative marketing had made progress, but united farmer action would be required to adjust production to demand. The problem of land utilization had assumed importance. This was directly counter to the traditional trend of individual

exploitation of land resources. We had more acres in cultivation now than we needed.

The cumulative pressure of agricultural problems increased continually. In 1929 general panic and depression burst on the country. Arthur M. Hyde, a former Governor of Missouri, became Secretary of Agriculture March 5, 1929 to serve until March 4, 1933. His first report reviewed the agricultural industry as a whole and the several crops specifically.

Meanwhile the Federal Farm Board had been organized. An adjunct of the Department, the Board had authority to create commodity stabilization corporations and to recognize and collaborate with farmer cooperatives. It could make loans from a half-billion-dollar revolving fund, but it had no control over production or acreage.

"The 1930 Drought" was the first subhead in Secretary Hyde's report for that year. The effects were so extended that relief would be required. The Red Cross had given aid, and Congress made emergency loans of 6 million dollars available both in 1929 and in 1930, although \$4,580,683 of the first 6 million dollars had already been repaid.

The Secretary contended once again that the tariff act of 1929 aided farmers by protecting their domestic market. On June 5, 1930 Congress provided for an expansion of the foreign agricultural service. The Bureau of Dairying was now the Bureau of Dairy Industry. The Grain Futures Administration made a separate report again. M. S. Eisenhower signed a report as Director of the Office of Information.

In the 1931 volume world influences were accused of depressing American agriculture which lacked a foreign market and was therefore surplus-burdened. Agriculture would positively benefit from the high tariff just as soon as we learned to quit producing for an export market that no longer existed.

The Department's basic task was still held to be scientific research, the results of which were not intended so much to stimulate production as to help balance supply and demand, guarantee the dependability of production, raise living

standards, and aid industry as a whole. This research also helped find new uses for agricultural commodities, thus founding new industries and spreading employment. It also improved the quality of commodities.

The Department had been a pioneer in developing wise land use policies; it had formulated the entire theory. A National Land Use Conference had been held in Chicago at its suggestion where all relevant ideas were discussed and programs were mapped out. The farm plant was still too large and land submarginal for agriculture simply contributed to tax delinquency, hence it must be kept out of cultivation. Soil erosion also must be stopped. Secretary Hyde said that the recommendations made by the conference on land use would be carried out.

Henry A. Wallace

On March 3, 1933 Henry A. Wallace, an Iowa farm editor and son of Henry C. Wallace, became Secretary of Agriculture. Actions taken at this time had roots in the research, the discussion, and the social and economic thinking carried on in the Department during the previous decade.

Congress accordingly passed the Agricultural Adjustment Act, approved May 12, 1933. Here again, it should be noted, there was no sharp break with the past. The ideas in that act had been mulled over frequently within as well as outside the Department. W. J. Spillman had some of the notions in his "Balancing the Farm Output" published in 1927, and M. L. Wilson, also previously an employee of the Department, was in part responsible for drafting the act. Howard R. Tolley and Charles J. Brand, also associated with the legislation, were not new to the Department.

Named as co-administrator of the Agricultural Adjustment Act with Mr. Brand, George N. Peek of Moline, Ill. had been another advocate of new methods of coping

with the farm surplus problem. These men, together with a Department economist, Mordecai Ezekiel, had much to do with pioneering the new era of adjustment and departure from precedent.

The Adjustment Act, as Secretary Wallace analyzed it in his first report, sought to raise the income of farmers in two ways. (1) Production was to be adjusted to demand. (2) The Secretary of Agriculture was to enter into marketing agreements with producers, processors, and distributors of agricultural products, in order to eliminate competitive wastes, improve trade practices, move surpluses into the market, and raise producers' prices.

The Agricultural Adjustment Act, generally referred to as the A.A.A. necessarily provoked thoughtful criticism as well as approval. In his report for 1935, Secretary Wallace considered a number of the issues that had been raised. He denied that the measure sought to create artificial scarcity. Given a rising demand for a particular commodity, production would be increased accordingly. The long-term objective of the program was to prevent recurring cycles of over and underproduction.

The Secretary reported that the stock of surpluses had been sharply reduced. This was due partly to the production curtailments of the national farm program. Another very important factor was the drought of 1934, which was the worst ever recorded in the United States. It extended over 75 percent of the country, severely affecting 27 States.

It was announced that several important changes had been made in the organization of the Department. The position of Under Secretary of Agriculture had been created and Rexford G. Tugwell appointed to fill the post. There was no longer to be a Director of Scientific Work, and an Office of Budget and Finance had been created.

In January 1936 the Supreme Court in the Hoosac Mills case invalidated the compulsory features of the Agricultural Adjustment Act. Congress thereupon passed the Soil Conservation and Domestic Allotment Act. The Annual Report for 1937 contains

a detailed description of this measure and the steps taken by the Department to enforce it. The discussion is prefaced by a noteworthy analysis of our national agricultural policy.

An altered economic world called for a new agricultural policy. But the link between the old and the new was direct and close. The old exploitation forced the new conservation. The Federal Farm Board, the McNary-Haugen plan, the A.A.A. programs, and the Soil Conservation and Domestic Allotment Act had one basic characteristic in common. They all recognized that modern problems cannot be solved by ancient formulas, and that agricultural policy today is necessarily in large measure the opposite of what it was in the period of the open frontier.

Secretary Wallace's final report cited the unpromising export outlook and the ominous rise of economic nationalism. It detailed the wide variety of defense functions the Department was performing and could perform. On September 4, 1940, Secretary Wallace resigned his post to become a candidate for the Vice Presidency. Under-Secretary Claude R. Wickard of Indiana became the next head of the Department.

It was the Agricultural Adjustment Act of May 12, 1933, which ushered in much new legislation that resulted in the setting up of the so-called "action agencies" of the Department. This act was designed to establish and maintain such balance between the production and consumption of agricultural commodities, and such marketing conditions therefor, as would reestablish prices to farmers at a level that would give farm products the purchasing power they had in specified earlier base periods. The base period for most commodities was 1909 to 1914.

Some of the legislative acts authorizing other parts of this action program were as follows: The Emergency Farm Mortgage Act of 1933; the Farm Credit Act of 1933; the Federal Farm Mortgage Corporation Act and the Jones-Costigan Sugar Act of 1934; the Soil Erosion Act of 1935; the Soil Conservation and Domestic Allotment Act, the Rural Electrification Act, and the Flood Control Act of 1936; the Agricultural Marketing Agreement legislation, the act placing the functions of the Federal Surplus Commodities Corporation in the Department, the Bankhead-Jones Farm Tenant

Act. the Norris-Doxey farm forestry legislation, the Pope-Jones water-facilities legislation, and the Sugar Act, all of 1937; and the Flood-Control Act, the Agricultural Adjustment Act, and the Federal Crop Insurance Act of 1938.

Some of these agencies were created as independent establishments and later came to the Department where some of them have since undergone changes in name and structure. The Farm Credit Administration was created in 1933, but became part of the Department only on July 1, 1939. The Rural Electrification Administration was set up as an independent agency on May 11, 1935, and came to the Department July 1, 1939. The Commodity Credit Corporation was established October 17, 1933, and was placed in the Department July 1, 1939.

Second World War

Secretary Wickard was an Indiana dirt farmer. He graduated from Purdue with a degree in animal husbandry and, even before that, began helping to operate the family farm settled by his great-grandfather in 1840. He continued to manage the farm after he came to Washington in 1933. Before that he had been a member of the Indiana State Legislature. He was a member of the National Corn-Hog Committee of Twenty-Five which helped establish the original corn-hog program of the Agricultural Adjustment Administration.

In 1935, Mr. Wickard became chief of the Agricultural Adjustment Administration corn-hog work, thus being the third future Secretary to work in the Department in a subordinate capacity before assuming that office. When the Agricultural Adjustment Administration's agricultural conservation program started in 1936, Mr. Wickard became assistant director of the North Central Division. He was appointed Under Secretary of Agriculture on February 1, 1940.

On March 29, 1943, Chester C. Davis became the first War Food Administrator,

serving until he resigned June 28, 1943; he was succeeded by Judge Marvin Jones, who served until the War Food Administration was recombined with the Department of Agriculture by Executive Order effective July 1, 1945. Mr. Wickard became head of the Rural Electrification Administration at this time.

An Office of Agricultural Defense (later War) Relations was set up in the Department on May 5, 1941, in response to a letter from the President. On July 5, Secretary's Memorandum No. 921, established State and county defense boards. On December 13, 1941, there was announced a major reorganization of the Department to streamline it for the war effort. This was validated by an Executive Order dated February 23, 1942. At this time three large administrations were established as follows: The Agricultural Conservation and Adjustment Administration was created by merging activities of the Agricultural Adjustment Administration (later Agricultural Adjustment Agency,) the Soil Conservation Service, the Federal Crop Insurance Corporation, and the Sugar Division.

The Agricultural Marketing Administration was created by merging the activities of the Surplus Marketing Administration, the Commodity Exchange Administration, the Agricultural Marketing Service, and the Consumers' Counsel Division of the Agricultural Adjustment Administration.

The Agricultural Research Administration was created by grouping the activities of seven old-line scientific bureaus and agencies concerned with research and regulatory work, four Regional Research Laboratories, and nine Bankhead-Jones Laboratories. The Agricultural Research Center at Beltsville, Md., was also placed under the supervision of the Administrator.

On June 9, 1942, the White House announced the appointment of a Combined Food Board, composed of the Secretary of Agriculture and the head of the British Food Mission. It was to effect planned and expeditious utilization of the food resources of the United Nations.

Streamling For War

Fundamental reorganization of the Department again took place as a result of the Executive Order, dated December 5. At that time the Food Production Administration and the Food Distribution Administration were established. These, with the Agricultural Research Administration, the Commodity Credit Corporation, the Forest Service, the Rural Electrification Administration, and the staff agencies, then constituted the Department.

Naturally the Secretary's wartime powers invested the Department with much more authority and importance than it had ever possessed hitherto. It began to touch the lives of every citizen and to assume a defense and later wartime role of the most critical character. Mr. Wickard's first annual report, submitted on November 1, 1941, was prefaced by a "postscript" announcing the Japanese attack on Pearl Harbor and our precipitation into World War II.

Gradually we began to produce what was needed for defense and war purposes, when needed, and in the quantity required. Farmers rose to new heights of efficiency each production year, the Department acting as over-all staff counselor and adviser. The Department became active in the fields of labor supply, plant site location, and transportation problems, and rendered assistance to farmers in procuring supplies and equipment, priorities and allocations.

A special far-reaching nutrition program was undertaken in foreknowledge that all our people must be reasonably well fed to meet the forthcoming emergency, and that we must also produce much food for our potential and probable allies. The war-time job of the Agricultural Adjustment Administration became greater than ever before. The year's production was outstandingly favorable and we entered the war far better fortified than we would have been had no national farm program existed.

Through the State and County War Boards the Department gave farmers technical aid, made arrangements about price supports and money payments, and generally

assisted them to fulfill their goal pledges. Every agency in the Department did its utmost to assist the Food and Freedom Program. Food conservation was stressed and scarce farm foods began to be allocated to specific needs. A research food-dehydration project soon showed the way to save cargo space and get more actual food value abroad more rapidly than ever.

WAR FOOD ADMINISTRATION

For war purposes the program agencies of the Department of Agriculture were grouped into two administrative units, each headed by an official appointed by and directly responsible to the President. The agencies in the War Food Administration were responsible to the War Food Administrator. The Agricultural Research Administration, Farm Credit Administration, Rural Electrification Administration, and Forest Service were responsible to the Secretary of Agriculture.

On April 30, 1943, the War Food Administration announced an organization to administer the farm labor program. The Director of the Extension Service became responsible for mobilizing farm labor for use within each State, and for the placing of all workers needed on farms to meet local labor needs.

An Office of Materials and Facilities, to aid farmers with their procurement problems, was established May 10, 1943, by War Food Administrator's Memorandum No. 4. The War Meat Board was established May 15, 1943, to facilitate the handling of the Nation's meat supply.

A Director of Transportation was appointed May 26, 1943. On August 25, 1943, the War Food Administration announced the establishment, effective September 1, of a National War Board.

The following changes in names of some old-line Department bureaus should also be mentioned. In February 1943, certain organizational and structural shifts were

made in the bureaus comprising the Agricultural Research Administration in the course of which the Bureau of Home Economics with the addition of the Division of Protein and Nutrition Research, formerly of the Bureau of Agricultural Chemistry and Engineering, became the Bureau of Human Nutrition and Home Economics; the Bureau of Agricultural Chemistry and Engineering became the Bureau of Agricultural and Industrial Chemistry, with the four Regional Research Laboratories now comprising most of it; and the Bureau of Plant Industry became the Bureau of Plant Industry, Soils and Agricultural Engineering.

Greater and Greater Food Production

During 1943 farm food production, as well as farm production generally, again set a record. The Department and the War Food Administration regarded food as a munition of war.

A new farm production record was set for 1943 and new goals were developed for 1944. The price stabilization problem occupied much attention. The Commodity Credit Corporation greatly expanded its operations in response to wartime emergency needs. Government food procurement was stepped up enormously and rationing was applied to a number of foods.

Peace and the World View

The world viewpoint assumed by the Department is significant of the way in which science had shrunk distances. Agriculture now had to be considered, not only in relation to domestic industry, but in the light of world finance and the plans of the United Nations as well. The world organizations of agriculture came into the picture with the meeting of the United Nations Food and Agriculture Conference,

at Hot Springs, Va. in May and June 1943. the constitution for the Food and Agriculture Organization was already being proposed.

During the war many new discoveries and ideas, ranging all the way from the natural to the social sciences, which had resulted from research, but were restrained from full utilization by the long depression, came into their own and could be used at top efficiency. Among these were better varieties of plants and animals, better protection from insect pests and plant and animal diseases, expanding mechanization, improved cultural and fertilizing methods, increased storage of fertility in the soil by the widespread use of conservation measures, the farm security device of supervised loans which gave borrowers funds and expert advice together in one package, and the use of price incentives and other economic devices to get the needed crops at the right time.

But, as peace approached, War Food Administrator Jones saw the need for reorganization and reconsolidation, and he resigned and returned to the bench that this might take place. Secretary Wickard at the same time became head of the Rural Electrification Administration.

On July 1, 1945, Clinton P. Anderson took office as Secretary, to have charge of both the Department of Agriculture and the War Food Administration, and to consolidate and organize them as he thought best. He regarded himself as primarily a businessman rather than a farmer, though he grew up on a farm, and also operated 800 acres of irrigated land in New Mexico as a dairy enterprise. In addition, he retained direction of the home farm of 640 acres, near Mitchell, S. Dak. At the time of his appointment he was a member of the U. S. House of Representatives, serving his third term, and had been chairman of a committee investigating food shortages. Born at Centerville, S. Dak., he was educated at Dakota Wesleyan and at Michigan universities. The first job facing him was departmental reorganization.

On June 29, 1945, the President, by Executive Order No. 9577, provided for the abolition of the War Food Administration and for the transfer of its functions to

the Department of Agriculture. In Memorandum No. 1106, July 3, 1945, the Secretary announced the appointment of a Committee on Reorganization, Milton S. Eisenhower, chairman. Its duty was to confer with all agency heads, and so to intergrate the War Food Administration and the Department of Agriculture as to avoid overlapping, duplication, and inefficiency in service to the public. Secretary's Memorandum No. 1118, August 18, 1945, announced the establishment of a Production and Marketing Administration which was, in effect, a consolidation of many agencies.

Famine Overseas and Its Relief

The President's 9-point Famine Relief Program was announced February 6, 1946, and the Department immediately began to take steps to launch it. Review of the Department's food programs was ordered February 15 and revision of 1946 farm-production goals on February 21.

The Famine Emergency Committee, after an all-day session at the Department, announced on March 11, its specific recommendations for the conservation of wheat, wheat products, and food fats and oils.

On April 9, a report by Herbert Hoover to the Famine Emergency Committee on European food needs was released and the next day the Secretary issued a call for world aid in the food fats and oils crisis.

New Legislation

The Research and Marketing Act, which became law August 14, 1946, provided for extension and expansion of Department research programs. The Farmers Home Administration Act became law the same day, abolishing the Farm Security Administration as such, establishing the Farmers Home Administration, and giving it various functions and responsibilities, including some which formerly lodged in the

Farm Credit Administration

In late 1946 an outbreak of foot-and-mouth disease was discovered in the Republic of Mexico and it rapidly spread over that country. Special legislation and the consent of the Mexican Government enabled the United States to cooperate with her nearby neighbor in efforts to stamp out the infection before it reached our livestock. This campaign began in 1947, and ended in 1952.

From the beginning to the end of his administration Secretary Anderson called for practically all-out farm production; this he did regardless of what curtailment plans industry might undertake. He consistently praised the ability, industry, and integrity of the Department's information work and differentiated sharply between it and propaganda. He resigned May 10, 1948, to run for the Senate.

Further Changes

Secretary Anderson was succeeded in office by his own Assistant Secretary, Charles F. Brannan, a native of Denver and graduate from the University of Denver Law School. Mr. Brannan specialized in irrigation and mining cases in private practice until he became an assistant regional attorney for the Resettlement Administration, in 1935. Two years later he became Regional Attorney for the Department's Office of the Solicitor, with headquarters still in Denver.

In 1941, Mr. Brannan became Regional Director of Farm Security Administration for Colorado, Wyoming, and Montana, still in his native city.

In 1944 he was called to Washington to become Assistant Administrator of Farm Security Administration, and was appointed Assistant Secretary of Agriculture two months later. As Vice Chairman of the Department's Program and Policy Committee he had much to do with formulating and carrying out policies, and he presented the Department's long-range agricultural program to Congress, in 1947.

He was succeeded by Secretary Ezra Taft Benson on January 21, 1953.

Benson Takes Office

Secretary Benson is a nationally known farm leader and a member of the Quorum of Twelve Apostles, Church of the Latter Day Saints, Salt Lake City, Utah. He was born at Whitney, Idaho, August 4, 1899, the son of George Taft and Sara (Dunkley) Benson.

He was a student at the Oneida State Academy, Preston, Idaho. His later educational career is as follows: The Utah State Agricultural College, Logan, Utah, 1918-21; B. S. from Brigham Young University, Provo, Utah, 1926; M. S. in agricultural economics, Iowa State College, 1927; graduate study, University of California, 1937-38.

Secretary Benson operated a farm in southern Idaho, 1923-29. In 1921-23 he served as a missionary for the Church of Jesus Christ Latter Day Saints in the British Isles and Europe. In 1929-30 he worked as a county agent for the University of Idaho Agricultural Extension Service at Preston, Idaho. From 1930 to 1938 Secretary Benson was extension economist and marketing specialist, in charge of economics and marketing work for the State of Idaho.

In the period of 1939-41 he served as executive secretary of the National Council of Farmer Cooperatives at Washington, D. C. Since 1943 Secretary Benson has been a member of the executive committee and was chairman of the board of trustees, American Institute of Cooperation at the time of his nomination (now resigned). He has been awarded scholarship, Gamma Sigma Delta, honorary society of agriculture, Iowa State College, and a fellowship at the University of California, Berkeley Calif.

He was a member and later the president of the Boise Stake of the Church of Latter Day Saints, Boise, Idaho, and during his stay in Washington, D. C. he was president of the Washington Stake. In 1946 he was named president of European missions for the Church. He serves on two national Boy Scout committees, is now on the executive committee of the National Boy Scouts of America. He has always

been deeply concerned with 4-H clubs and all youth welfare organizations. He belongs to the American Marketing Association, the Farm Economics Association, the Rotary Club, and Delta Nu fraternity. He has been a frequent contributor to agriculture, cooperative, and religious publications. He received the honorary recognition award from the College of Agriculture, University of Wisconsin, in February 1952.

Realignment Orders

On January 21, 1953, Secretary Benson issued Memorandum No. 1320 which set up five groups among the agencies for better administration. Then on March 10, 1953 by a supplemental memo to Memorandum No. 1320 he announced the regrouping of the Department's services into six groups with the addition of Foreign Agricultural Service with a Director of Foreign Agricultural Service as its head, thereby discontinuing the Office of Foreign Agricultural Relations.

This action was taken, according to the Secretary, to make possible a closer coordination of related activities. All the regrouped agencies retained their existing structure with the exception of the Agricultural Conservation Program. This was transferred from the Production and Marketing Administration and placed with the Research, Extension, and Land-Use Group.

The six groups, the agencies in each, and the officials named to head them:

Research, Extension, and Land-Use—Agricultural Conservation Program, Agricultural Research Administration, Bureau of Agricultural Economics, Extension Service, Forest Service, and Soil Conservation Service; with J. Earl Coke, Assistant Secretary, in charge.

Commodity Marketing and Adjustment—Commodity Credit Corporation, Commodity Exchange Authority, Federal Crop Insurance Corporation, Production and Marketing Administration; John H. Davis, President of the CCC as Director.

Foreign Agricultural Service—R. E. Short, Director

Agricultural Credit Services—Farm Credit Administration.

Farmers Home Administration, and Rural Electrification Administration; Robert L. Farrington, Acting Director.

Departmental Administration—Hearing Examiners, Library, Office of Budget and Finance, Office of Information, Office of Personnel, Office of Plant and Operations; Richard D. Aplin, Director

Office of the Solicitor—Karl D. Loos, Solicitor

Reconstitution Under Reorganization

Secretary's Memorandum dated June 4, 1953, announced that the Reorganization Plan No. 2 of 1953 had become effective at midnight on June 3. It transferred to the Secretary of Agriculture all functions within the Department not then vested in the Secretary, with certain exceptions. The Plan also provided for two additional Assistant Secretaries of Agriculture, an Administrative Assistant Secretary, and authority to the Secretary to make provisions for the performance of his functions, including any functions transferred under the Plan.

Until such time as any different dispositions may be ordered, the Secretary reconstituted the Department as it existed immediately prior to the effective date of Reorganization Plan No. 2, 1953. All agencies were thereby reassigned all functions transferred to the Secretary as they existed immediately prior to the effective date of the Plan. All actions by such agencies and officers taken prior to June 4, 1953 and still in force immediately prior to the effective date of Plan No. 2 were deemed to remain in force unless and until revoked or modified by proper authority.

Reorganization

In a Memorandum to All Department Employees, the Secretary on October 13, 1953 announced a reorganization of the Department. This reorganization was put in effect November 2, 1953.

The new organization put all service agencies of the Department under four main groups:

FEDERAL-STATES RELATIONS: Agencies in this group include:

Agricultural Research Service, Forest Service, Federal Extension Service, Soil Conservation Service, Agricultural Conservation Program Service, and Farmer Cooperative Service.

MARKETING AND FOREIGN AGRICULTURE: Agencies in this group:

Agricultural Marketing Service, Foreign Agricultural Service, and Commodity Exchange Authority.

AGRICULTURAL STABILIZATION: Agencies in this group:

Commodity Stabilization Service (including the administration of Commodity Credit Corporation programs), Federal Crop Insurance Corporation, and Community, County, and State Agricultural Stabilization and Conservation Committees.

AGRICULTURAL CREDIT: Agencies in this group:

Farmers Home Administration and Rural Electrification Administration.

On April 1, 1954, Secretary Benson regrouped the Department's Office of Information. The six media divisions were regrouped into three general activity divisions—current information, publications, and visual.

U. S. DEPARTMENT OF AGRICULTURE

Ezra Taft Benson
Secretary

True D. Morse
Under Secretary

Ralph S. Roberts
Administrative Assistant Secretary
Robert L. Farrington
General Counsel

Milan D. Smith
Executive Assistant
Secretary

Assistants to the Secretary

Don Paarlberg	Jack Z. Anderson
Robert D. McMillen	Charles Figy
Frederick W. Babbel	Clyde A. Wheeler, Jr.
Ernest C. Betts, Jr.	

Theodore S. Gold - Assistant to the Under Secretary
Thomas J. Flavin - Judicial Officer
Howard J. Doggett - Staff Assistant—Program Appraisal

FEDERAL-STATES RELATIONS

Assistant Secretary Ervin L. Peterson

Agricultural Conservation Program Service	Acting Administrator	Paul M. Keger
Agricultural Research Service	Administrator	B. T. Shaw
Farmer Cooperative Service	Administrator	Joseph G. Knapp
Federal Extension Service	Administrator	Clarence M. Ferguson
Forest Service	Chief	Richard E. McArdle
Soil Conservation Service	Administrator	Donald A. Williams

MARKETING AND FOREIGN AGRICULTURE

Assistant Secretary

Earl L. Butz
Edmund E. Pendleton, Jr.
Oris V. Wells
Rodger R. Kauffman
Gwynn Garnett

Assistant to the Assistant Secretary

Agricultural Marketing Service	Administrator
Commodity Exchange Authority	Administrator
Foreign Agricultural Service	Administrator

AGRICULTURAL STABILIZATION

Assistant Secretary

Marvin L. McLain
True D. Morse
Earl M. Hughes
C. S. Laidlaw

Commodity Credit Corporation	President
Commodity Stabilization Service	Administrator
Federal Crop Insurance Corporation	Manager

AGRICULTURAL CREDIT

Director

Kenneth L. Scott
R. B. McLeaish
Anchor Nelsen

Farmers Home Administration	Administrator
Rural Electrification Administration	Administrator

DEPARTMENTAL ADMINISTRATION Admin. Assist. Secretary

Office of Budget and Finance	Director	Ralph S. Roberts
Office of Hearing Examiners	Chief	J. C. Wheeler
Office of Information	Director	Glen J. Gifford
Library	Director	R. Lyle Webster
Office of Personnel	Director	Foster E. Mohrhardt
Office of Plant and Operations	Director	MacHenry Schafer

OFFICE OF THE GENERAL COUNSEL

General Counsel

Robert L. Farrington

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CURRENT SERIAL RECORDS

SOME LANDMARKS IN THE HISTORY OF THE DEPARTMENT OF AGRICULTURE

(Condensed Version)

Excerpts herein are based on Agriculture History Series No. 2, as
issued by the Department Committee
on Agricultural History

June 1962

Abridged as USDA Document No. 8

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SOME LANDMARKS IN THE HISTORY OF THE DEPARTMENT OF AGRICULTURE

The United States Department of Agriculture grew out of the Patent Office which was established 1790. During the 1830's the newly reorganized Patent Office, then in the State Department, began to distribute seeds and collect agricultural statistics. From these activities developed the separate agency devoted exclusively to the interests of agriculture.

The first Patent Commissioner under this new law, Henry L. Ellsworth (1791-1858), was the son of the third Chief Justice of the United States, Oliver Ellsworth. He was born in Connecticut and graduated from Yale in 1810. Ellsworth practiced law, but he also farmed and was a leader in the Hartford County Agricultural Society. He became president of a large insurance company and was active in business and civic life. He resigned as mayor of Hartford in 1835 to become head of the Patent Office on June 15 of that year.

In his annual reports (1838 and 1840) he requested funds from Congress for collecting and distributing seeds and compiling agricultural statistics.

In 1862, President Abraham Lincoln signed the bill establishing the United States Department of Agriculture, headed by a Commissioner. On February 9, 1889, the Department was raised to Cabinet rank, under the supervision and control of a Secretary.

At no time in its history could an informed observer show that the Department had sprung full-grown from the brow of a bureaucrat. The Department's work was expanded by Congressional authorization, often because different groups of citizens demanded that something be done in the field of agriculture.

Emergencies, like those created by the rapid rise of technology, widespread animal or plant ills, insect infestations, dust storms, droughts,

floods, the exploitation of forests, the need for better communication, or economic depressions, compel the Government to take action in new fields.

There is nothing new about public aid to agriculture. The farmer always battled the elements on a precarious basis. Far back in world history, before commercial farming became a reality, government had to aid him every now and then, if only to guarantee the food supply.

Societies and Study Lead to Changes

One of the first signs of the change in American agriculture was the establishment of agricultural and scientific societies by the so-called "gentlemen farmers." The Philadelphia Society for the Promotion of Agriculture was founded in 1785, and George Washington was elected an honorary member. Washington showed great interest in agriculture. He was often affectionately called "The Farmer of Mt. Vernon."

Washington's suggestions were favorably received by his Secretary of State and public men generally. A House of Representatives committee recommended in 1797, that an agricultural society be created, that high Government officials be ex-officio members, and that it meet annually. The measure never came to a vote.

In 1819 the Secretary of the Treasury directed consuls to collect seeds, plants, and agricultural inventions for introduction into this country, although there was no appropriation for the purpose.

The agricultural societies were a chief means by which improvements were brought to farmers. In 1852 there were 300 active agricultural organizations. By 1860 they numbered over a thousand. Closely related to their spread was the rise of agricultural fairs and journals. Elkanah Watson held his first real agricultural fair in Pittsfield, Mass. in 1810, with 26 farmers participating. He then organized the Berkshire Agricultural Society to hold annual fairs.

"The Agricultural Museum," believed to be the first farm journal in the country, was published in Georgetown, D. C., from 1810 to 1812 as the organ of the Columbian Society. More significant, however, was the "American Farmer" established at Baltimore in 1819 by John Skinner. Farm journals multiplied, appearing in every State, and all urged farmers to take up new and better methods of husbandry.

Congress also became aware of agriculture in this period. The House established an Agriculture Committee in 1820 and the Senate one in 1825. In addition, Congress in 1828 authorized the publication of a manual, prepared by Richard Rush, Secretary of the Treasury. It contained the best available information on the growth and manufacture of silk.

Economic Changes

The development of the reaper, the steel plow, the threshing machine, and other implements around this time eventually produced great changes in agricultural technology and in the general economic and social organization as well. The farmer's investment in these machines made it essential for him to increase his income. Thus his dependence on the commercial market increased.

President Van Buren recommended that Congress widen the scope of the Sixth Census, and induced that body in 1839, to permit the Patent Office to spend \$1,000 for the collection of agricultural statistics and for other agricultural purposes. It was natural, in these early days, that such work gravitate toward the Patent Office. The Patent Office was concerned with experimentation and the stimulation of enterprise and invention, and therefore with scientific progress in agriculture.

Government aid to agriculture was at last underway. The aid would progress: from increased regulation of production; from subsistence to

commercial agriculture; from self-reliance to dependence on Government guidance; from the exploitation to the conservation of natural resources; from traditional guesswork to the application of practical scientific knowledge; from uncoordinated individual activity to well-coordinated group action through governmental aid, using the democratic process.

Every successive new function undertaken by the Department of Agriculture will be found outlined in an act of Congress. Hence the expression "The Department of Agriculture did so and so" could be interpreted as an abbreviated way of saying, "The Department of Agriculture, responding to public demand through the execution of work directed by an appropriate act of Congress authorizing this activity, did so and so."

Social and Economic Problems Attacked

About 1900 another group of problems appeared. They concerned social and economic questions associated with our decreasing farm exports and the ever-increasing use of agricultural technology. The farmer now needed help in his credit and marketing problems, as well as in the formation and management of cooperatives. He needed adult education in agricultural science which was provided by demonstration farms and later by the Extension Service.

World War I accelerated exports to Europe, speculative land values, greatly increased cultivated acreage, and expanded use of agricultural technology, with a great decrease in farm horses and mules. Thus, millions of acres that had never been cultivated before were plowed up, while millions of other acres formerly used to pasture and grow feed for work animals became available for beef and dairy-herd production.

Early Department Work

In 1836, when the Patent Office became a separate Government bureau, it occupied rooms in Blodgett's Hotel in Washington. This building burned to the ground and all the patent records along with it. Only in 1840 did the Patent Office get its new building on F Street, now occupied by the Civil Service Commission.

During 1836 and 1837 Ellsworth, at his own expense and without Congressional authorization, distributed seeds and plants that he received for the purpose. Soon, seed distribution was to be regularized under Congressional authority. For a long time it consumed most of the Federal funds for agriculture. Finally, it became almost a disgrace, as certain heads of the Department declared. Congressional seed distribution was not ended until 1923.

Ellsworth felt there was great room for expanding research by selection of wheat varieties, some of which yielded 20 percent more than others. He reported experiments which indicated that the Indian corn crop could be increased by one-third simply by proper seed selection.

Ellsworth's 1839 account occupied only two printed pages. He remarked that: "The ordinary expenses of the Patent Office the past year, including payments for the library and agricultural statistics, were \$20,799.95."

Congress exhausted itself by its 1839 appropriation, and no grant was made for agricultural purposes in 1840 or in 1841. In 1842 another \$1,000 was made available and this sum was doubled in both 1843 and 1844. It rose to \$3,000 in 1845, but nothing was granted in 1846 and agricultural work was interrupted.

Commissioner Ellsworth's Reports are of special interest both because of his lively intelligence and of his urgent desire to aid agriculture.

His last one, in 1845, covered activities during 1844 and comprised a 520-page book. The Commissioner began by citing the low rates of pay in his office.

The Commissioner also mentioned the "electric fluid" which was achieving all sorts of things since it had been "confined and tamed." The telegraph annihilated distance. "Paper H" in the book detailed how Professor Page had telegraphed 40 miles. Elsewhere was published a letter from Professor Morse to the Secretary of the Treasury reporting upon the telegraphic transmission of the proceedings at the Democratic National Convention in Baltimore. Morse also suggested that the Government take over this new medium of communication and operate it as it did the postal service.

Agriculture As a Science

The science of agriculture had become a major study in the Patent Office. Abandoned and worn-out lands were being reclaimed. Guesswork and superstition was yielding to scientific analysis and the application of scientific principles. Science however must always persevere. Some scientists had first claimed that cornstalk sugar was grape sugar. Ellsworth felt sure that good sugar would soon be produced by this method on a large scale. It never was.

Edmund Burke became Commissioner of Patents in 1845, and held office till 1849. During his term the "Report" was greatly expanded and included tables of British and American imports and exports as well as English cotton quotations. In 1846 agricultural statistics were omitted for lack of an appropriation, but in 1847 they reappeared. In 1849 the Patent Office was placed in the new Department of the Interior. President Zachary Taylor recommended the establishment of a Bureau of Agriculture in the new Department. He said that Governmental assistance to agriculture was totally inadequate. Congress took no action.

Thomas Ewbank (1792-1870), reported to President Millard Fillmore in 1849. Ewbank served as Patent Commissioner from 1849 until 1852. Born in Durham, England, he began as an apprentice in the sheet-metal trade. He came to this country in 1819 and was thereafter an inventor, manufacturer, and author. His primary interest was the industrial application of chemistry and physics.

At the direction of the Secretary of the Interior a "practical and scientific agriculturist" was hired to attend agricultural matters in the Patent Office and to prepare the separate agricultural "Report." Daniel Lee, M.D., was appointed. Ewbank omitted agricultural statistics from the volume because he said they had been unreliable. He declined to "waste time and paper in printing crude guesses." He said that Congress or the State legislators should devise methods of getting good statistics worth printing.

In 1853, Daniel Lee wrote on agricultural progress during the year, his main concern still being the conservation of our natural soil resources. He again accused the cities of seducing farmers into sending them their soil riches in the form of foods and breadstuffs. He said that no generation had the right to destroy the soil, a sentiment echoed by a few other far-sighted men many years afterwards.

Lee also insisted that we should have agricultural schools to teach our young the principles of soil-building science. He urged Congress to take action. It was about 1849 that Jonathan Turner of Illinois began his campaign for industrial universities. This was part of the long struggle for popular and agricultural education which finally culminated in the passage of the Land-Grant College Act of 1862.

Continued Patent Office Reports

Silas H. Hodges, Patent Commissioner from November 8, 1852, to March 25, 1853, apologized for Lee's inferior agricultural Report that year. R. C. Weightman was Acting Commissioner from March 25 to May 15, 1853. On the next day Charles Mason became Commissioner, and he held office till 1857. He made Daniel Jay Browne the editor of agricultural reports and specified that statistics were to be omitted until reliable ones were collected.

Charles Mason (1804-82) was born in New York, attended West Point, and then turned to law and journalism. He became Chief Justice of the Supreme Court of Iowa Territory. After his retirement as Patent Commissioner he was a patent lawyer in Washington, D. C., but subsequently entered politics in Iowa. The Reports during his term of office contained fewer letters from correspondents and more learned essays of substantial character by writers like Joseph Henry and other distinguished men.

Samuel T. Shugert was in charge of the Patent Office until Joseph Holt (1807-94) became Commissioner, 1857 to 1859. Holt, a rather remarkable man, was born in Kentucky. Buchanan appointed him Patent Commissioner for his aid in a great Democratic victory. He became Postmaster General of the United States in 1859 and was later the first Judge Advocate General. He had much to do with the development of our military law and the supervision of court martials.

Land Grant Colleges Urged

At this time various groups were agitating for agricultural colleges, free land, and more Federal aid for farmers. If Congress would not appropriate money for the colleges at least it should make provision for

them in the form of public land grants. Both movements hit the consistent opposition of the southern delegation to Congress, which sincerely believed that the doctrine of States rights forbade any such Federal aids. One land-grant college bill did get through Congress during Buchanan's administration, but the President vetoed it because he thought that Federal grants to States were not only extravagant but unconstitutional.

William Darius Bishop (1827-1904), born in New Jersey, and a former railroad official and member of Congress, was made Commissioner of Patents by President Buchanan in 1859, and served until 1860, when he went back to railroading and politics. He was followed in office by Philip F. Thomas. Thomas resigned in 1860, without issuing a Report. The 1860 publication was edited by the "Superintendent of the Agricultural Division," Thomas G. Clemson, and from 1860 to 1861, S. T. Shugert was again Acting Commissioner.

It was maintained that the United States now needed much more than a mere Agricultural Division in the Patent Office. It now spent \$53,000 a year, had a superintendent, four clerks (including translators and writers), a curator or gardener, and his aides.

Increased Recognition Urged

The 1861 Report was issued in 1862 by the new Commissioner of Patents, David P. Holloway. It was the most complete agricultural manual issued by the Patent Office, but it contained no statistics other than a few on milk production. It consisted mainly of essays on the current progress of American agriculture. There was less material extracted from journals, newspapers, and books. Holloway was appointed in 1861 and served till 1865, after agriculture had left the Patent Office.

Holloway launched a prolonged and fervent plea for the establishment of an institution to serve agriculture in this country where three-fourths of the citizens were still farmers. He undoubtedly reflected a rising tide of public opinion or he would not have written as he did.

The United States Agricultural Society had been organized in 1852, and it ultimately became the most powerful force urging the establishment of a Federal Department of Agriculture. A National Convention of Agriculturalists was called to meet in Washington June 24-25, 1852, and the Agricultural Society was formed as a result. A hundred and fifty delegates were present and Marshall P. Wilder was elected the society's president.

The organization rapidly drew into its membership the leading farmers of the Nation, and its journal was powerful and highly regarded. From the outset it urgently sought public assistance for farmers, and at each meeting it urged the establishment of a Department of Agriculture with a Cabinet officer at its head.

The United States Agricultural Society kept up continual pressure, especially through Charles B. Calvert of Maryland, a member, who was elected to Congress July 4, 1861, and placed on the Agriculture Committee. Calvert worked for a department, not a bureau, though there was much hostility toward the idea of another Cabinet office being established. It was at one time suggested that the head of the department be elected by the farmers. Meanwhile Morrill was making headway on his land-grant college bill.

In 1859 an Advisory Board of Agriculture met at the request of the House Committee on Agriculture. After discussion it made a report recommending the creation of a Department of Agriculture with a Cabinet officer at its head. This report was suppressed, though its main recommendation became known.

Should the new agency be a department or merely a bureau, as Lincoln had suggested? Ultimately the House Committee on Agriculture decided in favor of a department in charge of a commissioner, and in such form the bill was finally enacted. It was felt that commercial and manufacturing interests were local in nature so they were not considered. It was stated they could easily combine among themselves and make their wants felt by the Government, while "Agriculture clad in homespun is very apt to be elbowed aside by capital."

Far-Reaching Agricultural 1862 Legislation

The fact that the Southern delegation no longer sat in Congress naturally facilitated the passage of the bill establishing the Department, because their opposition to further centralization of power in the Federal government might well have defeated it. President Lincoln signed the bill May 15, 1862. On May 20 he signed the Homestead Act, which provided for apportioning freehold farms, of 160 acres each, from the public domain to citizens who would make homes on them and work them for 5 years. Then on July 2, Lincoln approved the Land-Grant College Act fathered by Senator Justin Smith Morrill of Vermont.

The last-named law endowed the colleges with 11,000,000 acres of public land, nearly twice the area of Vermont. The States were authorized to sell the land and use the proceeds to endow their respective agricultural colleges. The States were thereafter to operate the colleges themselves. The law is constitutionally important as marking a beginning of Federal grants-in-aid to the States.

The Department of Agriculture was organized on July 1, 1862. Isaac Newton (1800-1867) who since early 1861 had been in charge of the Agricultural Division of the Patent Office, became the first Commissioner.

Public farm aid was not a nationally pulse-quickenning subject in those days. Gentleman farmers led the agitation for the establishment of the Department.

There was considerable political inertia on the subject, and rural America largely held to the Jeffersonian maxim that the best government was the least government. Senator Hale, in discussing the proposed department, said that the prevailing farmer attitude was: "For God's sake, let us alone!" There was no compact farm bloc, and professional consultants were not in agreement as to procedure.

The Department had mainly concerned itself with distributing seed, and largely lost the respect of agricultural scientists and journals. It did not appeal to the actual soil cultivator or dirt farmer for many years. The Nation made no effort for proper land settlement or to control land speculation and exploitation. As a matter of fact, no controls were lodged in the new Department. Food was needed for the Civil War, so an unnatural extension of farm-crop belts took place and new machinery was widely utilized. Economists of the day took the farmer for granted or ignored him.

The act establishing the Department of Agriculture in its preamble reads thus:

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, - That there is hereby established at the seat of Government of the United States a Department of Agriculture, the general designs and duties of which shall be to acquire and to diffuse among the people of the United States useful information on subjects connected with agriculture in the most general and comprehensive sense of that word, and to procure, propagate, and distribute among the people new and valuable seeds and plants.

The original act offers no evidence that any balanced social and economic program for agriculture was desired or much less visualized at

the time. Yet the law was very broad in scope. It gave the Department great latitude and discretion. The act prescribed the appointment of professionally qualified employees.

The First Commissioner, Isaac Newton

Isaac Newton, the first Commissioner of Agriculture, was born in New Jersey but grew up in Pennsylvania. He served from July 1, 1862, until his death in office on June 19, 1867. He was a Quaker of farmer stock and limited formal education. When he grew to maturity he managed two large farms in Delaware County, Pennsylvania, so well that they became celebrated as models. He became an active member of the Pennsylvania State Agricultural Society. In 1854 he purchased a thousand acres of land in Prince William County, Virginia, but the outbreak of the Civil War rendered this venture unsuccessful.

Newton was personally acquainted with Lincoln. One story has it that he delivered milk to the White House. Lincoln placed him successively in charge of agricultural work in the Patent Office and in the Department of Agriculture.

Early in 1863 Newton reported for the first time to President Lincoln. He began by quoting and discussing the organic act of his Department. He also reported that between July 1, 1862, and January 1, 1863, he had expended \$34,000, leaving an unexpended appropriation balance of \$26,000. He asked Congress to grant him \$130,000 for the fiscal year ending June 30, 1864, "which is deemed a low estimate."

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Department Objectives Take Shape

The earliest bound volume of Department of Agriculture publications, in the Department Library, begins with a circular from the Commissioner himself on the "Present Agricultural, Mineral, and Manufacturing Condition and Resources of the United States," dated 1862. Next there is a "Catalogue of the Plants, Bulbs, Tubers, for Distribution from the U. S. Propagating Garden," with a report on the "Objects and Aims of the Garden" by its superintendent, William Saunders, dated the same year. Then follows the "Report on the Chemical Analysis of Grapes," by Chemist Charles M. Wetherill, who concluded that our wine grapes were as good as those of Europe. The Commissioner's report for 1863 contained meteorological data supplied by Joseph Henry of the Smithsonian Institution.

Newton mentioned buildings, but not until 1867 did Congress appropriate \$100,000 for a building at 12th and B Streets. A stable was erected in 1879, and \$25,000 was appropriated to put up a building for the Seeds Division and the Division of Statistics in 1881. A greenhouse was erected in 1883, but no more new buildings until 1897.

The Commissioner recommended the founding of a library. One had been started in the Patent Office in 1840 when a clerk was appointed to gather statistics and useful agricultural material. In 1869 the Department got these books and added them to its own inadequate library. This occupied the entire west end of the first floor of the new Department building. J. B. Russell, the first librarian, was appointed in 1871.

Statistics Not The Whole Answer

Jacob R. Dodge, who was appointed statistician in 1866, was distinguished in his specialty, and served the Department well for 24 years. Statistics were long regarded as almost a divine revelation and as constituting the physics and physiology of society. Investors and speculators spent huge sums to obtain

figures from which to predict market fluctuations. They thought that reliable crop information would set the farmer right up in the world; and that he could foil speculators by withholding his crops from market till the right time. It was a beautiful theory but did not work, partly because too few farmers fully understood the implications of the statistics provided for them.

During the Civil War, some areas had prospered. The Corn Belt had begun to be stabilized in the present area. Wisconsin and Illinois were still the chief wheat-producing states, but the Wheat Belt began to move generally across the Mississippi. The Cotton Belt had also begun to move westward, away from the exhausted lands of the Southeast.

In 1865, Commissioner Newton reported to President Johnson. It was a time for world expansion. Some department scientists had been sent to Europe and Asia to make observations, and they traveled very economically. In fact Townsend Glover had attended the Paris entomological exhibit at a cost of only \$500.

Horace Capron, Second Commissioner

Chief Clerk John W. Stokes was Acting Commissioner from June 20, 1866, until December 4, 1867, when Horace Capron (1804-85) was appointed Commissioner. Capron was born in Massachusetts, but grew up in New York. In 1836 he erected a cotton mill at Laurel, Maryland, which he later made into a model factory. Upon his resignation as Commissioner June 27, 1871, he went abroad to become agricultural adviser to the Japanese Government.

Commissioner Capron showed considerable interest in steam plowing and reported 3,000 steam plows at work in England and only 2 in the United States. His report included a 10-page article on the "History of American Inventions for Cultivation by Steam." It was written by a patent examiner and well illustrated. The new Commissioner said he had reorganized the Department, making drastic changes. By 1868, the Department had about 47 employees.

The New Building Completed - 1868

In 1868 Commissioner Capron reported to President Johnson that the new building was at last completed. It was of Renaissance architecture, 3 stories high, and 170 by 61 feet. Its steam-heating apparatus was reported to be in successful operation. Including furniture and laboratory equipment it had cost \$140,420. Reporting to President Grant for 1870, Commissioner Capron again protested the insufficient remuneration of his staff and asked much larger appropriations. He reported expenditures of \$169,175.

President Grant appointed Frederick Watts (1801-89) to succeed General Capron, and he took office in 1871. Watts was born in Pennsylvania of Welsh extraction. He grew up on a farm, studied law and was president of the Cumberland Valley Railroad Company from 1845 to 1871, but he had meanwhile engaged in scientific farming. Watts had experimented with various types of farm buildings and had organized farm societies. He was the first head of the Department to give attention to our timber supply. His reports are dated from 1871 to 1876.

Watts appointed the statistician, J. R. Dodge, to serve also as editor. Dodge complained that it was very difficult to get properly qualified people to compile and edit agricultural reports. The compensation, \$1,200 to \$1,800 a year, was too low to attract workers with broad agricultural experience and high literary skill.

In 1872 the Department had an appropriation of \$197,070. In 1873 the Commissioner spoke of the increasing importance of entomology, and noted the cost and extent of insect damage.

Chemist William McMurtrie was devoting his time to agricultural products. Watts had been annoyed by private individuals who wanted the departmental chemist to test wine, patent medicines, and mine samples for them, and even to give them certificates of merit. Since there had been loud complaints about

frauds in commercial fertilizers the chemist was told to analyze some of them and publish the results.

1872 Staff

In 1872 when James M. Swank wrote his brief account of the Department's history and development, J. R. Dodge was statistician, William Saunders the superintendent of gardens, Townsend Glover entomologist, Ryland T. Brown chemist, George Vasey botanist, J. R. Russell librarian, and Andrew Glass superintendent of the seed room. The Department had 50 clerks and specialists and 50 messengers, laborers, and other employees.

President Hayes appointed William G. LeDuc (1823-1917) Commissioner of Agriculture on July 1, 1877. He was born in Ohio, the son of a French father who had come to the United States to help the colonists in the Revolutionary War. LeDuc had studied law, been admitted to the bar, and had become active in and around St. Paul in the development of the farm country. He served in the Union army and later entered railroading. As Commissioner, he established a tea farm and was greatly interested in sugar beets, sorghum, and animal diseases, the last interest resulting in the Bureau of Animal Industry.

Commissioner LeDuc's first Annual Report was for 1877. In it he presented a table to show that the Department of Agriculture received small appropriations as compared with other Federal Government agencies.

In 1879 a Veterinary Division was established to carry out fully the work on animal diseases. Congress had also appropriated \$10,000 for study of the history and habits of insects. Veterinarians contributed long articles on animal diseases in this 1879 volume. The last report submitted by LeDuc was that for 1880.

Low Salaries Reported

LeDuc also wrote that the departmental employees received lower pay than those doing similar work in other Departments. His distinguished chemist received only \$2,000 a year (when he got it) for his "laborious and valuable" services, whereas a chemist who worked a short while detecting fraud in sugar for the Treasury Department received four times that much.

Dr. George B. Loring (1817-91), of Massachusetts, educated as a physician, but also a scientific farmer and a Victorian-type political orator, was appointed Commissioner of Agriculture by President Garfield, July 1, 1881. Loring had operated a stock farm and had done much to further agriculture throughout his life.

Loring's first volume bears the dates 1881 and 1882. D. E. Salmon, later to be first chief of the Bureau of Animal Industry, and already a distinguished scientist, was in charge of the Veterinary Division. Reports were printed by several veterinarians regarding contagious pleuropneumonia, and agitation was rife for Federal action.

Organization and Growth in 1883 and After

In 1883 the Department consisted of the Division of Gardens and Grounds; the Botanical Division; the Microscopic Division; the Chemical Division; the Entomological Division; the Division of Statistics; the Veterinary Division; the Forestry Division; and the Seed Division.

Not many years later Theobald Smith, F. L. Kilborne, and Cooper Curtice solved the cattle-tick fever puzzle in the Bureau of Animal Industry by proving that the tick was the transmitting agent. This was a fundamental medical discovery of far-reaching importance.

Disease and Public Welfare

The first report of the Bureau of Animal Industry was mainly devoted to contagious pleuropneumonia and cattle-tick or southern cattle fever. The bill creating the Bureau was introduced by William H. Hatch of Missouri. This

marked a notable extension in the interpretation of the general welfare clause of the Constitution. Here was a problem that was actually beyond the capacities of the States, and individual freedom had to be restricted by the Federal Government for the public welfare.

The Bureau stamped out contagious pleuropneumonia in 5 years, a world record for its control and a tremendous boon for livestock men. The Bureau thereafter performed a long line of outstanding scientific research on hog cholera, hookworm, bovine tuberculosis, anthrax, blackleg, cattle-tick fever, contagious abortion, and many other animal and fowl diseases.

The First Secretary, Norman J. Colman

We come now to the last Commissioner of Agriculture who was also the first Secretary of Agriculture, Norman J. Colman (1827-1911) of Missouri. He was appointed by President Cleveland to take office April 3, 1885, and his first Report is dated that year. Colman was born in New York; taught school, studied law, and fought in the Civil War. After the war he started "Colman's Rural World" in St. Louis. He was elected to the Missouri State legislature and manifested much interest in the State university and served in many agricultural organizations.

Colman was appointed because of his broad knowledge of agricultural problems and was most certainly the most competent head the Department had up to that time. He was largely instrumental in effecting the passage of the Hatch Act which founded the State agricultural experiment stations and gave the Department its second Bureau, the Office of Experiment Stations.

State Experiment Stations - 1887

Largely through Colman's interest a meeting was held in 1883 to consider the establishment of State experiment stations with Federal aid and a permanent organization was effected at the third meeting in 1887 - the Association of American Agricultural Colleges and Experiment Stations. The agricultural societies,

especially the Grange and similar agencies, clamored for action. On March 2, 1887, the Hatch Bill was passed establishing the first national system of agricultural experiment stations in the world and setting up the Office of Experiment Stations in the Department of Agriculture to coordinate their efforts. This authorization of combined Federal and State work naturally required some departmental reorganization.

W. O. Atwater was made Chief of the Office of Experiment Stations and A.C. True was associated with him.

The Department had received scant praise in its career so far. The farmers could not well apply the knowledge they had received in the form in which they received it. That was a gap which the Extension Service filled a decade or so later. Congress must give the Department scope for educational, economic, and social as well as scientific functions.

Agitation for Cabinet Rank - 1889

The 50th Congress (December 5, 1887 - March 3, 1889) was deluged with petitions and memorials asking that the Department be given Cabinet rank. This was not altogether new agitation; it had gone on periodically for 30 years. Bills had even been introduced and occasionally passed by the House of Representatives to give the Department cabinet rank. Finally on February 9, 1889, a bill was approved by President Cleveland which advanced the Department to Cabinet rank, headed by a Secretary. Commissioner Colman was nominated and on February 13 confirmed as the first Secretary of Agriculture. The sources of lawmaking are very clear in this instance. Congress created the Department of Agriculture, because of the hard effort, ceaseless agitation, and widespread expression of views by those who favored such legislation.

Colman left office with Cleveland. The incoming President Harrison appointed Jeremiah M. Rusk (1830-93) and he assumed office on March 6, 1889. Rusk had been born on a farm in Ohio, but in 1853 he went to Wisconsin to keep a tavern. This

venture was a success so he started a stage line which was also profitable, and in time he became Governor of Wisconsin. His period as Secretary of Agriculture was marked by eradication of destructive cattle diseases, and legislation for meat inspection. Rusk's particular contribution was his recognition of the importance of publicity and his ability to interest the press in departmental activities.

Reorganization in 1889

Secretary Rusk promptly reorganized the Department. He retained direction of the executive work himself and placed the scientific work under the first Assistant Secretary Edwin Willets. He set up a Division of Records and Editing and urged the frequent publication of the results of scientific work in clear language that practical farmers could readily understand. This began publication of Farmers' Bulletins. Rusk also began a systematic investigation of foreign markets for American farm products. He indicated that our farm exports were not so profitable as they once were.

The Department of Agriculture had the following branches in 1889: Division of Statistics; Division of Entomology; Division of Chemistry; Section of Silk Culture; Botanical Division; Section of Vegetable Pathology; Division of Economic Ornithology and Mammalogy; Division of Microscopy; Office of Experiment Stations; Forestry Division; Division of Gardens, Grounds, and Horticulture; Seed Division; Division of Pomology; Folding Room Library; Museum; Bureau of Animal Industry.

In 1891 the Weather Bureau became the Department's third unit of bureau status. It had been transferred from the War Department, because the public considered the civilian control would make it more useful to agriculture and commerce. Since the Department had long carried on meteorological work the transfer was appropriate.

Cleveland, returning to the Presidency, appointed J. Sterling Morton (1832-1902) Secretary of Agriculture. He assumed his post March 7, 1893. He was born in New York and enjoyed the "distinction" of having been expelled from the

University of Michigan for his independence. He had located in Nebraska City where he became a politician and newspaper editor. Morton had long been a student of agriculture, and had owned and worked a Nebraska quarter-section. He had a passion for tree planting and became the founder of Arbor Day. As Secretary, he emphasized economy and so objected to free seed distribution that he actually put a stop to it for a time.

Reporting for 1893, the Secretary urged better departmental organization and gave some information about foreign agricultural departments. He said that the classified civil service was defective because there was too much injustice in rank and pay. Secretary Morton commented that the Act creating the Department had provided it with no building. The main structure erected in 1867 to accomodate 50 people in 4 divisions was now far too small.

The Dairy Division and its initial operation were described in Morton's 1895 Report. Henry E. Alvord was its first chief. Civil Service status had been extended to the Department's 2,019 employees by Presidential order in 1895, which included all of them except the Presidential employees and common laborers. The Department now had 429 female employees.

In his final statement, Morton recorded that the Department's annual appropriation was \$2,583,750.

Two Million Dollars Worth of Seeds

The Secretary consistently operated the Department economically and turned money back to the Treasury. He was very hostile to seed distribution and insisted it be abolished, and had actually tried to stop seed distribution by injunction. Seeds to the amount of two million dollars in retail value had been sent out in competition with those sold by retail seedsmen. Later the seedsmen were given the business of making the distribution themselves which mollified them.

The Secretary gave the average age of the chiefs of his scientific bureaus as 42 years and 3 months, the oldest being 51 and the youngest 29. He said that their salaries of \$2,500 were insufficient. Even the directors of the State experiment stations received more. Turn-over was high because the scientific staff was underpaid.

At this point Secretary Morton left office and James Wilson of Iowa was appointed his successor by President McKinley in 1897.

Secretary Wilson (1836-1920) was born in Ayrshire, Scotland; he came to the United States in 1851 and chose farming as his life work. He early became a community leader in Tama County, Iowa, was elected to the legislature, and also served three terms in Congress. In 1891 he was made professor of agriculture and head of the experiment station in Iowa State College. Henry Wallace, father of Henry C. and grandfather of Henry A., suggested his name to President McKinley for Secretary of Agriculture. Wilson continued in office for 16 years, remaining under Presidents Roosevelt and Taft.

Turn of Century Sees Great Advancement

Farm demonstration and cooperative extension work were undertaken during Secretary Wilson's term and a small army of experts and scientists was employed. The Department grew into a magnificent research, regulatory, educational, and custodial institution. Each manifestation of growth represented an effort to provide the services demanded by the public and authorized by Congress. Not only did natural science research attain very high quality under Secretary Wilson, but social and economic studies advanced rapidly.

While James Wilson held office, urban influences on rural life rapidly intensified. Transportation and communication vastly improved. More automobiles and better roads gave farmers new access to markets. Competition grew keener and farm credit became an acute problem. Fewer people were engaged in farming.

In 1910 only 32 percent of all gainfully employed persons were in agriculture, and the estimated average equity of farm operators in the land they tilled was 50 percent.

In his report for 1899 Wilson started the custom of beginning with brief items summarizing the year's outstanding accomplishments. Atwater now had a flow of nutrition bulletins appearing, and Wiley reported on food preservatives. N. E. Hansen, M. A. Carleton, Water T. Swingle, and David Fairchild were mentioned as plant explorers.

In 1900 Secretary Wilson expressed his determination to bring scientists to the aid of farm producers, 21 million copies of departmental publications had been distributed.

In 1901 the Secretary effected the long-needed reorganization of related departmental units into bureaus. The Bureaus of Plant Industry, Chemistry, Forestry, and Soils were created with chiefs getting \$5,000 each. B. T. Galloway became the first head of the Bureau of Plant Industry and Harvey W. Wiley headed the Bureau of Chemistry. Milton Whitney became chief of the Bureau of Soils which took over all work on soil surveys, soil analysis, soil technology, and drainage investigations. Gifford Pinchot was made Forester.

Farm Demonstration Experiments Begin

In the 1902 Report we find first mention of the farm-demonstration experiments to show the value of using scientific cultivation on selected "demonstration" farms in various communities. This novel and important idea originated with Seaman A. Knapp of the Bureau of Plant Industry. Ultimately the Extension Service was organized to carry agricultural adult education right to farmers on their own farms. At that time, though, agricultural editors and farmers' institutes were pioneering in this work that later became an organized governmental activity.

The cotton boll weevil speeded Dr. Knapp's farm demonstration work, when the weevil produced a crisis in cotton production. Texas especially appealed loudly for Federal aid. At one huge mass meeting in Dallas half a million dollars was demanded to fight the weevil. The farm-demonstration method proved an ideal means of instruction. Dr. Knapp also won praise for the 250,000 acres of rice growing in Texas from varieties he had introduced.

In 1904 Secretary Wilson referred to farmers as our greatest source of natural wealth. The Bureau of Entomology, with L. O. Howard at its head, was established in accord with recommendations made the year before. It was aiding the rapid spread of farm-demonstration work to cope with the boll weevil. The Weather Bureau announced that it would interpret "the language of the sun" at Mt. Weather.

On February 1, 1905, custody of the national forests was transferred to the Department and fused with its Bureau of Forestry to form the Forest Service. The Bureau of Chemistry reported that it had lost many employees due to the low salaries paid. It was studying food poisons and standards and cooperating with the Post Office Department in protecting the mails from makers of fake remedies. The Bureau of Statistics had considerably improved its crop reporting, and the Office of Road Inquiry became the Office of Public Roads.

In 1906 the Department reported an annual appropriation of \$7,175,690. There were 1,594 employees in Washington and 4,648 in the field. The new East and West Wings of the present Administration Building were nearly complete but by no means large enough.

Dr. Wiley had helped in the passage of his Food and Drug Law on June 30, 1906, and the Bureau of Chemistry was charged with its enforcement. A force of chemists and inspectors had to be appointed, and before long the number of employees in the Bureau of Chemistry was doubled.

Agricultural science had enormously increased production, but this increase

was accompanied by a reduction in farm exports and a diminishing rate of population growth. However, farmers could always provide sufficient food for our population, so the Secretary seemed satisfied with conditions. He praised farmer cooperatives and the rapid extension of the Farmers Cooperative Demonstration Work.

Country Life Commission a Landmark

President Theodore Roosevelt appointed his Country Life Commission in 1908. The Commission held 30 hearings throughout the nation. It sought aid from over 100,000 persons. Dr. L. H. Bailey of New York was its chairman. The other members were Henry Wallace of Iowa; Walter Hines Page, who later became war-time ambassador to Great Britain; Gifford Pinchot, the great forester and later Governor of Pennsylvania; and Dr. Kenyon L. Butterfield of Massachusetts Agricultural College.

The Commission held that a new race of teachers should appear in the country and that a new rural clergy be trained. It suggested increased farmer cooperation, the promotion of rural social advantages, and expansion of efforts to make country life more "gainful" and more rewarding. It recommended that inventory be taken of our rural resources from the soil up, that a united campaign be instituted for rural progress, and that the extension work be organized on a national basis through the State colleges of agriculture.

It was in 1908 as well, that serious study of farm economics was undertaken in the Bureau of Plant Industry, with W. A. Peek in charge. The subjects of investigation were farm accounts, farm records, and the economic value of using farm equipment.

By this time the Department was enforcing food, game, drug, bird, livestock, quarantine, and meat-inspection laws, and many others. Its work had to expand constantly, as Congress passed new laws and charged the Department with their enforcement.

Farm cooperative demonstration work was widespread now, 7 years after its inception. Farm children also were being organized in clubs. Farm economic studies continued in the Bureau of Plant Industry where "farm problem or extension work" began. Trained men were being sent out as teachers. W. J. Spillman spread this farm demonstration work to the North and West; in 1911 he helped establish the first Farm Bureau. Bradford Knapp, son of Seaman A., carried on the farm cooperative demonstration work in the South.

Dynamic Era in The Department - Secretary Houston

When Secretary Wilson left office with President Taft, a definite era in the history of the Department of Agriculture ended. The incoming President Woodrow Wilson appointed the historian, economist, financier, and former college president, David F. Houston, Secretary of Agriculture. The appointment was an appropriate one at this juncture of the Nation's agricultural affairs. Secretary Houston had received a master's degree in government at Harvard. He taught at the University of Texas after which he became president of that State's land-grant college.

Secretary Houston ushered in a period of more attention to broad social and economic issues affecting farmers. As he said in his 1913 Report: "We have unmistakably reached the period where we must think and plan." Nevertheless, study of agricultural policies indicates marked continuity throughout. When changes occur, the new will be found to have its roots in the old--in some research or fact finding investigation that went on earlier.

Houston realized that farm-management studies could no longer be carried on effectively in the Bureau of Plant Industry. He recognized the great importance of extension work and understood that it should function more independently. He asked the advice of such men as Thomas N. Carver of Harvard, George F. Warren of Cornell, Andrew Boss of Minnesota, H. C. Taylor of Wisconsin, James A. Foord of Massachusetts Agricultural College, John I. Falconer of Ohio State, and Richard L. Adams of the University of California. He inaugurated the "New Freedom" period which actually extended to the death of Henry C. Wallace.

Centralization

Finally, Secretary Houston saw the need for greater centralization within the Department and set up a number of staff agencies to effect integration. Originally the Department consisted largely of independent research sections and divisions which generally pursued their own ways.

Office of Markets

In response to long-continued agitation, and in recognition of the new emphasis on agricultural distribution, Congress specifically provided for the acquiring and diffusing among the people, useful information on subjects connected with the marketing and distribution of farm products, and made \$10,000 immediately available in 1913-14. To carry out the intention of Congress Secretary Houston established the Office of Markets, attached directly to his office. Under the leadership of Charles J. Brand it rapidly became one of the spearheads in the vigorous attack on economic and social problems.

In 1914 the Office of Markets assumed more importance. The Cotton Futures Act had been passed. Studies of rural credit were under way and better dissemination of information was evident. The Smith-Lever Agricultural Extension Act was passed on May 8, 1914, and the Extension Service was being organized to carry out its provisions. It provided for personal-contact teaching methods, financed by grants-in-aid. Formal agreements between the Department and the land-grant colleges were needed. The Office of Information was created.

By 1916 work on marketing, finance, and rural organization, mapped in earlier reports, was well under way. Acts, establishing agricultural product standards, as well as the grain futures, grain standards, warehousing, and Federal farm-loan and Federal-aid road laws, had all been passed. The

loan act was especially designed to create a banking system, tailored to rural needs.

World War I Brings Record Production and Activity

By 1917 Houston was stressing all efforts to increase farm production for domestic use and export. The Food Administration was started, with Herbert Hoover in charge. The Cooperative Extension Service sprang into new usefulness in showing farmers how to increase food production to win the war. An additional appropriation of over 4 million dollars was made to expand this work. Farmers responded vigorously, struck the plow into land hitherto untilled, and won praise for it. Home economics work, Federal and State, increased in importance under impact of war conditions.

A record acreage had been planted by 1918 and crop yields had been stimulated. Every agency pushed this work. Authority was now granted to use motion pictures for agricultural education. Interest in farm land increased, land speculation got under way, and farm values shot up miraculously, tempting farmers to top-heavy mortgage indebtedness.

Declining Markets

The day following Secretary Houston's resignation to become Secretary of the Treasury, February 2, 1920, Edwin T. Meredith, an Iowa farm editor, became Secretary of Agriculture. He served until March 4, 1921, and made the report for 1920 in which farmers were still being praised for glorious wartime service. But Secretary Meredith advised farmers that they now faced a declining market, with shrinkage of land and other values, and the Secretary admitted that there was no simple solution for this complex problem. World conditions were chaotic.

Surplus

In 1922 President Harding called an agricultural conference in Washington; the Grain Futures Act was also passed this year. The surplus became the chief agricultural problem; it was at first attacked as a marketing and later as a marketing and production problem.

On March 5, 1921, President Harding appointed Henry C. Wallace, father of Henry A. Wallace, as Secretary of Agriculture. In his first report, for 1921, Wallace frankly recognized the dangerous nature of the farmer's position with overexpanded acreage, inflated land values and an uncertain foreign market confronting him, and an industrial depression under way. The farmer was said to produce on faith and take great risks, and his 1920 crops were produced at the greatest cost known.

Marketing Part of Production

Marketing was now seen to be an integral part of production, though scientific research was still regarded as basic, and a Director of Scientific Work was appointed. Henry C. Taylor became chief of the new Bureau of Agricultural Economics on July 1, 1922. Work in home economics was also still increasing in importance. Wallace warned that no new land should be opened to cultivation and recommended intensive, cost-lowering methods to farmers.

Secretary Wallace died in office October 25, 1924, and Assistant Secretary Howard M. Gore immediately became Acting Secretary. He was appointed Secretary of Agriculture and served until March 4, 1925, when he resigned to become Governor of West Virginia. The 1924 volume was prepared under the direction of Secretary Wallace; Gore transmitted it as Acting Secretary.

Fewer Farmers, Less Equity

The Bureau of Dairying was established by Congress in 1924. The dairy industry had asked for the establishment of a bureau to consolidate work in this field. It almost seemed as if the departmental research workers had overreached themselves. Set to lowering the unit costs of agricultural production and to improving yields, they had succeeded so admirably as to aid in producing enormous surpluses.

Only 22 percent of all our gainfully employed people were engaged in agriculture in 1930. The estimated average equity of farm operators in the land they farmed was only 41 percent. This dropped to 39 percent 5 years later. The agricultural export market suffered increasingly serious competition; the day of loans to Europe had passed, and our own tariff walls not only effectively shut out foreign goods, but stimulated similar action on the part of other nations. The highly protective Hawley-Smoot Tariff Act was passed in 1930.

Industrial Prosperity Masks Dangerous Farm Conditions, 1925-29

On March 5, 1925, William M. Jardine, President of the Kansas State College of Agriculture, took office as Secretary of Agriculture and served until 1929. During his term, ominous conditions in agriculture were somewhat masked by the spurious and highly specialized industrial and financial "Prosperity."

Agricultural exports were said to have increased. The farm-credit situation was regarded as bad, the small farmer suffered. Local agricultural credit organizations were suggested as a remedy. In some regions, it was held there was actually lack of confidence in future expansion.

Agricultural pressure groups also recommended the passage of laws to authorize agricultural credit corporations and for expanding livestock grazing rights in national forests. Investigations were already under way

on high freight rates and farm taxes, and it was insisted that some of the tax load must be removed from farm property. The Department also saw that it must aid in the business organization, management, and operation of farm cooperatives, as well as the education of farmers in regard to them.

In 1927 the farm problem was still acute. The Secretary suggested that: wastes be cut; production costs be lowered; the margin between producer's cost and consumer's purchasing price be less; transportation and distribution costs be reduced; the tax burden redistributed to help reduce the farmer's overhead; and that farmers cooperate to improve their bargaining power. What should be done was clearly seen; how to do it remained puzzling.

Cooperative marketing had made progress, but united farmer action was needed to adjust production to demand. The problem of land use was important. This was directly counter to the traditional trend of individual exploitation of land resources. We had more acres in cultivation now than we needed.

Panic and Depression, 1929

The pressure of agricultural problems increased continually. In 1929 general panic and depression burst on the country. Arthur M. Hyde, a former Governor of Missouri, became Secretary of Agriculture in 1929, to serve until March 4, 1933.

Meanwhile the Federal Farm Board had been organized. The Board had authority to create commodity stabilization corporations and to recognize and collaborate with farmer cooperatives. It could make loans from a half-billion-dollar revolving fund, but it had no control over production or acreage.

1930 - Drought and Tariffs

"The 1930 Drought" was the first subhead in Secretary Hyde's report for that year. The effects were so extended that relief was required. The Red Cross had given aid, Congress made emergency loans of 6 million dollars available, both in 1929 and 1930, although \$4.5 million of the first 6 million dollars had already been repaid.

The Secretary said again that the Tariff Act of 1929 aided farmers by protecting their domestic market. On June 5, 1930, Congress provided for an expansion of the Foreign Agricultural Service. The Bureau of Dairying was now the Bureau of Dairy Industry. The Grain Futures Administration made a separate report again. M. S. Eisenhower signed a report as Director of the Office of Information.

In the 1931 Report, world influences were accused of depressing American agriculture, which lacked a foreign market and was therefore surplus-burdened. Agriculture would positively benefit from the high tariff just as soon as we learned to quit producing for an export market that no longer existed.

The Department's basic task was still held to be scientific research, the results of which were not intended so much to stimulate production as to help balance supply and demand, guarantee the dependability of production, raise living standards, and aid industry as a whole. This research also helped find new uses for agricultural commodities, thus founding new industries and spreading employment. It also improved the quality of commodities.

National Land Use Conference

The Department had been a pioneer in developing wise land-use policies; it had formulated the entire theory. A National Land Use Conference had been held in Chicago, where all relevant ideas were discussed and programs were mapped out. The farm industry was still too large and submarginal

land simply contributed to tax delinquency, hence it "must be kept out of cultivation. Soil erosion also must be stopped." Secretary Hyde said that the recommendations made by the Land Use Conference would be carried out.

Secretary Henry A. Wallace, Continues Previous Policy

On March 4, 1933, Henry A. Wallace, an Iowa farm editor and son of Henry C. Wallace, became Secretary of Agriculture. Actions taken at this time had roots in the research and the social and economic thinking carried on in the Department during the previous decade.

Congress accordingly passed the Agricultural Adjustment Act, approved May 12, 1933. Here again, it should be noted, there was no sharp break with the past. The ideas in that act had been mulled over frequently within, as well as outside, the Department. W. J. Spillman had some of the notions in his "Balancing the Farm Output" published in 1927, and M. L. Wilson, also previously an employee of the Department, helped draft the Act. Howard R. Tolley and Charles J. Brand, also associated with the legislation, were not new to the Department.

Aims of A.A.A.

The Adjustment Act, as Secretary Wallace analyzed it in his first report, sought to raise the income of farmers in two ways. (1) Adjust production to demand. (2) The Secretary of Agriculture was to enter into marketing agreements with producers, processors, and distributors of agricultural products; to eliminate competitive wastes, improve trade practices, move surpluses into the market, and raise producers' prices.

The Agricultural Adjustment Act provoked thoughtful criticism as well as approval. In his report for 1935 Secretary Wallace considered a number of the issues that had been raised. He denied that the measure

sought to create artificial scarcity. Given a rising demand for a particular commodity, production would be increased accordingly. The long-term objective of the program was to prevent recurring cycles of over- and underproduction.

The Secretary reported that surplus stocks had been sharply reduced. This was due partly to the production curtailments of the national farm program. Another very important factor was the drought of 1934, which was the worst ever recorded in the United States. It extended over 75 percent of the country, severely affecting 27 States.

Several important changes had been made in the organization of the Department. The position of Under Secretary of Agriculture had been created and Rexford G. Tugwell appointed to fill the post. There was no longer a Director of Scientific Work, and an Office of Budget and Finance had been created.

A.A.A. Invalidated, 1936

In January 1936 the Supreme Court in the Hoosac Mills case invalidated the compulsory features of the Agricultural Adjustment Act. Congress thereupon passed the Soil Conservation and Domestic Allotment Act. The Annual Report for 1937 contains a detailed description of this measure and the steps taken by the Department to enforce it. The discussion is prefaced by a noteworthy analysis of our national agricultural policy.

A New Agricultural Policy

An altered economic world called for a new agricultural policy. But the link between the old and the new was direct and close. The old exploitation forced the new conservation. The Federal Farm Board, the McNary-Haugen plan, the A.A.A. programs, and the Soil Conservation and Domestic Allotment Act had one basic characteristic in common. They all

recognized that modern problems cannot be solved by ancient formulas, and the agricultural policy today is necessarily in large measure the opposite of what it was in the period of the open frontier.

Secretary Wallace's final report cited the unpromising export outlook and the ominous rise of economic nationalism. It detailed the wide variety of defense functions the Department was performing and could perform. On September 4, 1940, Secretary Wallace resigned his post to become a candidate for the Vice Presidency. Under Secretary Claude R. Wickard of Indiana became the next head of the Department.

It was the 1933 Agricultural Adjustment Act which ushered in much new legislation resulting in setting up the so-called "action agencies" of the Department. This Act was designed to establish and maintain balance between the production and consumption of agricultural commodities. Such marketing conditions would reestablish farmers prices at a level to give farm products the purchasing power they had in specified earlier base periods. The base period for most commodities was 1909 to 1914.

A Broad Action Program

Some of the legislative acts authorizing other parts of this action program were: The Emergency Farm Mortgage Act of 1933; the Farm Credit Act of 1933; the Federal Farm Mortgage Corporation Act and the Jones-Costigan Sugar Act of 1934; the Soil Erosion Act of 1935; the Soil Conservation and Domestic Allotment Act, the Rural Electrification Act, and the Flood Control Act of 1936; the Agricultural Marketing Agreement legislation, the Bankhead-Jones Farm Tenant Act; the Norris-Doxey farm forestry legislation, the Pope-Jones water facilities legislation, and the Sugar Act, all of 1937; and the Flood-Control Act, the Agricultural Adjustment Act, and the Federal Crop Insurance Act of 1938.

Some of these agencies were created as independent establishments and later came to the Department where some of them have since undergone changes in name and structure. The Farm Credit Administration was created in 1933, but became part of the Department only in 1939. The Rural Electrification Administration was set up as an independent agency in 1935, and came to the Department in 1939. The Commodity Credit Corporation was established in 1933, and was placed in the Department in 1939.

Second World War

Secretary Wickard was an Indiana dirt farmer. He graduated from Purdue with a degree in animal husbandry and, even before that, began helping to operate the family farm settled by his great-grandfather in 1840. He continued to manage the farm after he came to Washington in 1933. Before that he had been a member of the Indiana State Legislature. He was a member of the National Corn-Hog Committee of Twenty-Five which helped establish the original corn-hog program of the Agricultural Adjustment Administration.

In 1935 Mr. Wickard became chief of the Agricultural Adjustment Administration corn-hog work, thus being the third future Secretary to work in the Department in a subordinate capacity before assuming that office. When the Agricultural Adjustment Administration's agricultural conservation program started in 1936, Mr. Wickard became assistant director of the North Central Division. He was appointed Under Secretary of Agriculture on February 1, 1940.

On March 29, 1943, Chester C. Davis became the first War Food Administrator, serving until he resigned June 28, 1943; he was succeeded by Judge Marvin Jones, who served until the War Food Administration was recombined with the Department of Agriculture by Executive Order effective

July 1, 1945. Mr. Wickard became head of the Rural Electrification Administration at this time.

An Office of Agricultural Defense (later War) Relations was set up in the Department on May 5, 1941, in response to a letter from the President. On July 5, Secretary's Memorandum No. 921 established State and county defense boards.

Streamlining For War

On December 13, 1941, there was announced a major reorganization of the Department to streamline it for the war effort. This was validated by an Executive Order dated February 23, 1942. At this time three large administrations were established as follows:

(1) The Agricultural Conservation and Adjustment Administration (later Agricultural Adjustment Agency), the Soil Conservation Service, the Federal Crop Insurance Corporation, and the Sugar Division.

(2) The Agricultural Marketing Administration was created by merging the activities of the Surplus Marketing Administration, the Commodity Exchange Administration, the Agricultural Marketing Service, and the Consumers' Counsel Division of the Agricultural Adjustment Administration.

(3) The Agricultural Research Administration was created by grouping the activities of seven old-line scientific bureaus and agencies concerned with research and regulatory work, four Regional Research Laboratories, and nine Bankhead-Jones Laboratories. The Agricultural Research Center at Beltsville, Md., was also placed under the supervision of the Administrator.

On June 9, 1942, the White House announced the appointment of a Combined Food Board, composed of the Secretary of Agriculture and the head of the British Food Mission. It was to effect planned and expeditious

use of the food resources of the United Nations.

Continued Wartime Changes

Fundamental reorganization of the Department again took place as a result of an Executive Order dated December 5, 1942. At that time the Food Production Administration and the Food Distribution Administration were established. These, with the Agricultural Research Administration, the Commodity Credit Corporation, the Forest Service, and Rural Electrification Administration, and the staff agencies, then constituted the Department.

Naturally the Secretary's wartime powers invested the Department with much more authority and importance than it had ever possessed before. It touched the lives of every citizen and assumed a defense and later critical wartime role.

Gradually we began to produce for defense and war purposes, when needed, and in the quantity required. Farmers became more efficient each production year, the Department acting as over-all staff counselor and adviser. The Department was active in labor supply, plant site location, and transportation problems. It rendered assistance to farmers in procuring supplies and equipment, priorities and allocations.

A special far-reaching nutrition program was undertaken in foreknowledge that all our people must be reasonably well fed to meet the emergency. We also had to produce much food for our potential and probable allies. The war-time job of the Agricultural Adjustment Administration became greater than ever before. The year's production was outstandingly favorable and we entered the war far better fortified than we would have been had no national farm program existed.

Through the State and County War Boards the Department gave farmers technical aid, made arrangements about price supports and money payments, and generally assisted to fulfill their goal pledges. Every agency in the Department did its utmost to assist the Food and Freedom Program. Food conservation was stressed and scarce farm foods were allocated to specific needs. A research food dehydration project soon showed the way to save cargo space and get more actual food value abroad more rapidly than ever.

War Food Administration

For war purposes the program agencies of the Department of Agriculture were grouped into two administrative units, each headed by an official appointed by (and directly responsible to) the President. The agencies in the War Food Administration were responsible to the War Food Administrator. The Agricultural Research Administration, Farm Credit Administration, Rural Electrification Administration, and Forest Service were responsible to the Secretary of Agriculture.

On April 30, 1943, the War Food Administration announced an organization to administer the farm labor program. The Director of the Extension Service became responsible for mobilizing farm labor for use within each State, and for the placing of all workers needed on farms to meet local labor needs.

An Office of Materials and Facilities, to aid farmers with their procurement problems, was established May 10, 1943, by War Food Administrator's Memorandum No. 4. The War Meat Board was established May 15, 1943, to facilitate the handling of the Nation's meat supply.

A Director of Transportation was appointed May 26, 1943. On August 25, 1943, the War Food Administration announced the establishment, effective September 1, of a National War Board.

The following changes in names of some old-line Department bureaus should also be mentioned. In February 1943, organizational and structural shifts were made in the bureaus comprising the Agricultural Research Administration. In the course of this, the Bureau of Home Economics (with the Division of Protein and Nutrition Research) became the Bureau of Human Nutrition and Home Economics; the Bureau of Agricultural Chemistry and Engineering became the Bureau of Agricultural and Industrial Chemistry (with the four Regional Research Laboratories now comprising most of it); and the Bureau of Plant Industry became the Bureau of Plant Industry, Soils, and Agricultural Engineering.

Greater and Greater Food Production

During 1943 farm food production, as well as farm production generally, again set a record. The Department and the War Food Administration regarded food as a munition of war.

A new farm production record was set for 1943 and new goals were developed for 1944. The price stabilization problem occupied much attention. The Commodity Credit Corporation greatly expanded its operations in response to wartime emergency needs. Government food procurement was stepped up enormously and rationing was applied to a number of foods.

Peace and the World, A New Outlook (FAO)

The world viewpoint assumed by the Department is significant of the way in which science had shrunk distances. Agriculture now had to be considered, not only in relation to domestic industry, but in the light of world finance and the plans of the United Nations as well. The world agriculture organizations came into the picture with the meeting of the United Nations Food and Agriculture Conference at Hot Springs, Va., in

May and June 1943. The constitution for the Food and Agriculture Organization was already being proposed.

Full Use of New Discoveries

During the war many new discoveries, ranging all the way from the natural to the social sciences, came into use. These had been restrained from full use by the long depression, but were used at top efficiency in the war years. Among these were: better plant and animal varieties; better protection from insect pests and plant and animal diseases; expanding mechanization; improved cultural and fertilizing methods; increased storage of fertility in the soil, by the widespread use of conservation measures; the farm security device of supervised loans which gave borrowers funds and expert advice together in one package; and the use of price incentives and other economic devices, to get the needed crops at the right time.

A Time For Reconsolidation

But, as peace approached, War Food Administrator Jones saw the need for reorganization and reconsolidation, and he resigned and returned to the bench that this might take place. Secretary Wickard at the same time became head of the Rural Electrification Administration.

On June 30, 1945, Clinton P. Anderson took office as Secretary, to have charge of both the Department of Agriculture and the War Food Administration, and to consolidate and organize them as he thought best. He regarded himself as primarily a businessman rather than a farmer, though he grew up on a farm, and also operated 800 acres of irrigated land in New Mexico as a dairy enterprise. In addition, he retained direction of the home farm of 640 acres near Mitchell, S. Dak. At the

time of his appointment he was a member of the U. S. House of Representatives, serving his third term, and had been chairman of a committee investigating food shortages. Born at Centerville, S. Dak., he was educated at Dakota Wesleyan and at Michigan universities. The first job facing him was departmental reorganization.

On June 29, 1945, the President, by Executive Order No. 9577, provided for the abolition of the War Food Administration and for the transfer of its functions to the Department of Agriculture. In Memorandum No. 1106, July 3, 1945, the Secretary announced the appointment of a Committee on Reorganization, Milton S. Eisenhower, chairman. It was to confer with all agency heads, and integrate the War Food Administration and the Department of Agriculture, to avoid overlapping and inefficiency. Secretary's Memorandum No. 1118, August 18, 1945, announced the establishment of a Production and Marketing Administration which was a consolidation of many agencies.

Famine Overseas and Its Relief

The President's 9-point Famine Relief Program was announced February 6, 1946, and the Department immediately began to take steps to launch it. Review of the Department's food programs was ordered February 15; revision of 1946 farm production goals, on February 21.

The Famine Emergency Committee, after an all-day session at the Department, announced on March 11 its specific recommendations for the conservation of wheat, wheat products, and food fats and oils.

On April 9 a report by Herbert Hoover (to the Famine Emergency Committee on European Food Needs) was released and the next day the Secretary issued a call for world aid in the food fats and oils crisis.

New Legislation, 1946

The Research and Marketing Act of 1946, later renamed the Agricultural Marketing Act of 1946, provided for extension and expansion of USDA programs of research, service, and education. The Act declared AAA Congress' policy to promote a scientific approach to the problems of marketing that would match the approach used so successfully on problems of production since the USDA was established in 1862. And, it called for an integrated administration of all laws related to agricultural marketing.

The Farmers Home Administration Act became law the same year, establishing the Farmers Home Administration, continuing and expanding supervised credit programs of the Farm Security Administration as such.

In late 1945 an outbreak of foot-and-mouth disease was discovered in Mexico and it rapidly spread over that country. Special legislation, and the consent of the Mexican Government, enabled the United States to cooperate with her neighbor to stamp out the infection before it reached our livestock. This campaign began in 1947, and ended in 1952.

From the beginning to the end of his administration, Secretary Anderson called for practically all-out farm production; he did this regardless of what curtailment plans industry might undertake. He consistently praised the ability, industry, and integrity of the Department's information work and differentiated sharply between it and propaganda. He resigned May 10, 1948, to run for the Senate.

Further Changes, 1948

Secretary Anderson was succeeded in office by his own Assistant Secretary, Charles F. Brannan, on June 2, 1948.

Mr. Brannan was born in Denver August 23, 1903, and was graduated from the University of Denver Law School in 1929. He specialized in irrigation and mining law in private practice until he became an assistant regional attorney for the Resettlement Administration in 1935. Two years later he became Regional Attorney for the Department's Office of the Solicitor in Denver.

In 1941 Mr. Brannan became regional director of Farm Security Administration for Colorado, Wyoming, and Montana.

In 1944 he was called to Washington to become Assistant Administrator of Farm Security Administration, and was appointed Assistant Secretary of Agriculture 2 months later.

The Brannan Plan

In January 1949, the Congressional committees on agriculture began a review of the Agricultural Act of 1948. The major point of controversy was whether major commodities should be supported at a fixed high-level percentage of parity, or should be on a flexible scale. As a result of these and other studies, Secretary Brannan developed a set of proposals which became known as the Brannan plan.

The basic elements of his proposal included: (1) The use of an income standard, based on a 10-year moving average, as a method of computing price support levels; (2) support for a priority list of major commodities, at full support standard; (3) income support for growers of perishable commodities, by direct Government payments; (4) restricting supports to "family farm" units; and (5) compliance with approved conservation practices and production or marketing controls, to receive benefits.

The Brannan plan was not adopted by Congress. Instead, the Agricultural Act of 1949 was a modification of preceding legislation, setting support prices at 90 percent of parity for 1950 and between 80 and 90 percent for 1951, when acreage allotments or marketing quotas were in effect. If allotments or quotas were not in effect, the support prices were to fall between 75 and 90 percent of parity.

Organization for Korean War

On June 25, 1950, the Republic of Korea was invaded, and the United Nations promptly went to its aid. But, the major fighting force and supplies came from the United States. For three years, this war influenced every aspect of American life.

The Defense Production Act of 1950 controlled price ceilings for agricultural products. The Secretary of Agriculture was made responsible for priorities, allocations and requisitions for food, and domestic distribution of farm equipment and fertilizer.

The "police action" became a national emergency, and food and fiber were necessary to meet any eventuality, with emphasis on increased feed crops, cotton, and special defense crops. Neither acreage nor marketing controls were in effect for the 1951 and 1952 crops of wheat, rice, corn, beans, or cotton. Price supports for most basic crops were held at 90 percent of parity.

All out efforts, including a State-by-State production analysis, were made to increase agricultural production. Studies made at the end of the war show that the Department was successful in its task.

Conservation and Research

Secretary Brannan placed great emphasis on soil and water conser-

vation and research. Forest conservation also made gains during this period. Work in soil survey was assigned to the Soil Conservation Service; soil, crop and water management research were concentrated in the Agricultural Research Administration.

Beginning in 1950, Department scientists made direct contributions to the war effort. They obtained encouraging results in experiments to flameproof cotton fabrics, improved dehydrated eggs, potatoes, and other foods, and helped develop more concentrated frozen products. Department scientists helped to develop dextran, a blood plasma extender.

Other important work during this period included: Credit for low income farmers, cooperative credit, farm electricity and telephones, and increased emphasis on the family farm.

Brannan was succeeded by Secretary Ezra Taft Benson on January 21, 1953.

Secretary Benson was born at Whitney, Idaho, where he grew up on a farm. His schooling included 3 years at the Utah State Agricultural College; a year at Brigham Young University, Provo, Utah, where he was graduated with a B. S. degree; a year at Iowa State College, Ames, where he received an M. S. degree in agricultural economics; and a year of graduate study at the University of California, Berkeley.

After a year as county agricultural agent at Preston, Idaho, he was appointed extension economist and marketing specialist for the State of Idaho. From this position he was selected to serve as executive secretary of the National Council of Farmer Cooperatives. At the time of his appointment as Secretary of Agriculture, he was serving as chairman of the board of trustees of the American Institute of Cooperation and was a

member of the Council of Twelve Apostles, Church of Jesus Christ, Latter-Day Saints.

Reorganization - Four Major Groups

In 1953, Secretary Benson reorganized the Department service agencies into four main groups:

Federal-State Relations - Agricultural Research Service, Forest Service, Federal Extension Service, Soil Conservation Service, Agricultural Conservation Program Service, and Farmer Cooperative Service.

Marketing and Foreign Agriculture - Agricultural Marketing Service, Foreign Agricultural Service, and Commodity Exchange Authority.

Agricultural Stabilization - Commodity Stabilization Service, Federal Crop Insurance Corporation, and Community, County and State Agricultural Stabilization and Conservation Committees.

Agricultural Credit - Farmers Home Administration and Rural Electrification Administration.

Programs

Falling farm prices -- coupled with increased production costs, a growing accumulation of government-owned surplus farm products, a continued drought in the Great Plains and the ever-present need to conserve the Nation's soil, water, timber, grass and wildlife resources -- led to the inauguration of new farm programs.

The Soil Bank Program -- This was divided into two parts: (1) an Acreage Reserve Program, designed to reduce the production of surplus crops, by paying farmers to plant less. This ended with the 1958 crop. (2) A Conservation Reserve Program, with the dual purpose of reducing acreages of surplus crops and of diverting land to conservation uses.

Rural Development Program -- A Department report showed that a million and a half farm families had cash incomes under \$1,000 a year. To open wider the doors of opportunity to low-income families, a national committee was organized. This committee, working with local organizations and Government personnel, set up Rural Development programs in designated pilot counties. These programs were to improve living conditions for the rural families. By September 1960, rural development work was planned or underway in 262 counties in 30 States and Puerto Rico.

Small Watershed Projects -- Under Public Law 566, local organizations applied for Federal assistance in planning and carrying out protection of small watersheds and flood prevention.

Great Plains Conservation Program -- Several years of severe drought in the Great Plains led to a Great Plains Conference in 1955. Out of this conference eventually came the Great Plains Conservation Program, to aid farmers with long-range planning for land-use adjustments, technical assistance, and cost-sharing for conservation under contracts up to 10 years.

Multiple Use -- The Multiple Use - Sustained Yield Act of 1960, recognized the renewable resources of the National Forests - recreation, range, timber, watershed and wildlife. The law directed that National Forests be administered for the multiple use and sustained yield of their products and services.

Expanding Agricultural Markets -- Foreign agricultural markets were further developed in 1954 by marketing studies abroad, and by constant effort to reduce foreign barriers against U. S. farm products. Public Law 480 provided for sales of U. S. agricultural commodities for foreign

currencies, and for barter, disaster relief and donations. Since 1954, P. L. 480 sales for foreign currencies have exceeded \$6 billion market value, and total agricultural exports have risen from about \$3 billion to about \$5 billion a year.

Secretary Freeman, 1961

On Jan. 21, 1961, Orville L. Freeman, 42, was sworn in as the Nation's 16th Secretary of Agriculture, the youngest man ever to occupy this position and the first from Minnesota.

He was born of Scandinavian parents in Minneapolis on May 9, 1918, and as a boy spent his summers on the family farm which his greatgrandfather homesteaded in the 1850's. After graduating from the Minneapolis public schools, the future Secretary attended the University of Minnesota where he received a B. A. degree, magna cum laude, in 1940. He is a Phi Beta Kappa.

Following his graduation in 1940, Secretary Freeman entered the University of Minnesota Law School. War interrupted his legal training, but he returned to his studies and received his law degree in 1946.

From 1941 to 1945, he served in the Marines, rising from Second Lieutenant to Major. While leading a combat patrol on Bougainville Island in the South Pacific, a Japanese sniper bullet shattered his jaw and severely injured him.

His speech impaired, Secretary Freeman was hospitalized for eight months. He underwent special speech therapy and is now nationally recognized as an outstandingly fluent and forceful speaker.

While completing his law degree at the University, and after graduation, Secretary Freeman was assistant to the Mayor of Minneapolis,

Hubert H. Humphrey, in charge of veterans affairs, from 1945 to 1949. From 1946 to 1949, he also was chairman of the Minneapolis Civil Service Commission.

Secretary Freeman built a successful law practice during the early 50's, as a partner in a Minneapolis law firm. He was elected Governor in 1954 and re-elected in 1956 and 1958.

Besides his political and governmental activities, the Secretary is active in many civic, professional and church activities. He has been a deacon in the Ebenezer Lutheran Church in Minneapolis and has served as an officer in numerous civic, veteran and other organizations.

Secretary's Staff

Charles S. Murphy, a native of North Carolina, serves as Under Secretary. He came to this position with a broad experience in agriculture, agricultural legislation and legal practice. He served under President Harry S. Truman, first as Administrative Assistant and then as Special Counsel. As a specialist in agricultural legislation, he helped draft the Agricultural Adjustment Act of 1938. Prior to his service as Under Secretary, he had practiced law in Washington, D. C. since 1953. In February 1962, the Foreign Agricultural Service was placed under his general supervision.

Dr. Frank J. Welch is Assistant Secretary for Federal-States Relations. A native of Texas, his career experience has been primarily in the field of agricultural education. In 1945 he served as Dean of the College of Agriculture and Director of the Experiment Station at Mississippi State College. In 1951, he accepted a similar position at the University of Kentucky with the added responsibility of serving as

Director of Extension Service. He has also served as one of the three directors of TVA.

John P. Duncan, Jr., Assistant Secretary for Marketing and Stabilization, began his career in the Department as administrative assistant in the Franklin County, Georgia, AAA office. Moving up in AAA, he came to Washington in 1941 as an administrative assistant in the Southern Region Section. For a number of years he operated a 1,700-acre Georgia farm in partnership with his father. In 1957, he was elected president of the Georgia Farm Bureau Federation. He was born on a farm near Quitman, Ga.

John A. Baker, Director of Agricultural Credit, began his career with the Department in 1935 as an agent for the Bureau of Agricultural Economics in Arkansas and was Executive Assistant to the Under Secretary of Agriculture. Most of his 14 years of service with the Department has been as an economist with the Farm Security Administration and the Bureau of Agricultural Economics. For 10 years he was Director of Legislative Services for the Farmers Union and was a consultant on land tenure for foreign aid programs under the Technical Cooperation Administration.

Willard W. Cochrane, Director of Agricultural Economics, came to the Department in 1939 as an economist for the Farm Credit Administration when FCA was under Department administration. He also served as an economist in the War Food Administration and BAE and was professor of agricultural economics, University of Minnesota, 1951 to 1961. In Minnesota, he headed a Governor's Study Commission on Agriculture,

appointed in 1957 by Secretary Freeman, then Governor of the State.

Joseph M. Robertson, Administrative Assistant Secretary, came to the Department with a background of Federal and State Administrative experience including 10 years as Commissioner of Taxation and Director of Tax Research in Minnesota. He was also instructor in political science at the University of Minnesota.

Realignment, Agricultural Economics

Secretary's Memorandum 1446, Feb. 24, 1961, combined the economic services and functions of AMS, ARS, and FAS under a Director of Economics, and named two new agencies: The Economics Research Service and the Statistical Reporting Service.

Other Changes

Changes, in addition to the realignment of the Department's economic services, included: The transfer of ACPS to CSS; functions of the barter and stockpiling division of CSS placed in Foreign Agricultural Service; some marketing orders and agreements of Agricultural Marketing Service moved to CSS, renamed the Agricultural Stabilization and Conservation Service.

State Experiment Station administration and supervision were transferred from ARS and a new agency established as the Cooperative State Experiment Station Service in July 1961.

In mid-June 1961, Secretary Freeman set up the Office of Rural Areas Development with prime responsibility, in the Department, to carry out and coordinate responsibilities under the Area Redevelopment Act and other activities under Public Law 87-27.

As part of his program to cut costs and increase efficiency in

the Department, Secretary Freeman set up an Office of Management Appraisal and Systems Development in December 1961. This office directs management studies, coordinates the use of automatic data processing equipment and supervises development of the Department's centralized payroll, personnel, budget and accounting systems.

In June 1962, he established a central office of Internal Audit and Inspection, to report directly to the Secretary, with responsibility for maintaining the highest standards of performance in all internal audit and investigation activities within the 10 agencies that make up the Department of Agriculture.

Agencies of the U. S. Department of Agriculture, June 1962

Agricultural Credit

Farmers Home Administration

Rural ~~Electrification~~ Administration

Office of Rural Areas Development

Agricultural Economics

Economic Research Service

Statistical Reporting Service

Management Operations Staff

Agricultural Marketing and Stabilization

Commodity Credit Corporation

Agricultural Marketing Service

Agricultural Stabilization and Conservation Service

Commodity Exchange Authority

Federal Crop Insurance Corporation

Federal-States Relations

Agricultural Research Service

Cooperative State Experiment Station Service

Farmer Cooperative Service

Federal Extension Service

Forest Service

Soil Conservation Service

Foreign Agriculture

Foreign Agricultural Service

Departmental Administration

Office of Budget and Finance

Office of Hearing Examiners

Office of Information

Office of Management Appraisal and Systems Development

National Agricultural Library

Office of Personnel

Office of Plant and Operations

Office of the General Counsel

Programs and Projects

Immediately after taking office, Secretary Freeman and his staff moved ahead on several fronts to strengthen agriculture and improve conditions for farmers, as well as the whole country.

Consumers Benefit

Very early, the Secretary launched a campaign of better understanding about agriculture by urban people. On television, radio, through the press, and in speeches before many groups, he stressed the achievements of American agriculture as "the great success story" of our day. Among other points stressed were that consumers had never been able to get more or better food, for fewer hours of work, than now. He also emphasized that, while the urban worker's income had been climbing from year to year, farm income and farm prices went down.

Improved Marketing

Marketing of farm products have been strengthened. A notable example is a more vigorous enforcement of the Packers and Stockyards Act, to curb unfair practices in livestock and poultry marketing that tend to restrain trade or create a monopoly.

Secretary Freeman announced that after 10 years of research, development, and demonstration, the Department would offer a dual grading service for beef on a voluntary, trial basis for one year beginning July 1, 1962. The purpose is to enable the meat industry to identify those animals and carcasses yielding the most high-quality beef with the least waste fat, so that cattle buyers can pay producers in line with the real consumer value of the beef. This will benefit producers and consumers by stimulating more economical production of high quality beef, reducing production of exterior waste fat, and strengthening the market for beef.

A few months after Secretary Freeman took office, a Pioneering Research Laboratory was formally established, where scientists are

seeking out fundamental information about the life processes of fruits and vegetables -- getting down to the very basics of plant structure to study individual plant cells and particular tissues. This is an important part of applying "a scientific approach to the problems of marketing."

The 1961 Feed Grain Program

Agricultural legislation was introduced to bolster farm income and strengthen agriculture's position in the Nation. One of the first of these was the 1961 Feed Grain Program.

The 1961 Feed Grain Program was designed to provide four major benefits:

1. Increase farm income.
2. Prevent further buildup of the feed grain surplus and reduce it, if possible.
3. Help assure the consumer fair and stable prices for meat, poultry and dairy products.
4. Reduce ultimate feed grain program costs to taxpayers.

Under this program, farmers receive payments for reducing acreages of corn and grain sorghum by at least 20 percent and diverting the land taken out of these crops to prescribed conservation use. In addition, they are eligible for price support on their 1961 feed grain production.

Announced national average supports for 1962 are: \$1.20 per bushel for corn, \$1.93 per hundred weight for grain sorghum, 93 cents a bushel for barley, 62 cents for oats and \$1.02 for rye. Non-

participating corn or grain sorghum producers are not eligible for price supports on any of the above crops.

1,170,000 farms were signed up to participate in the 1961 feed grain program. This is about 42 percent of the estimated total number of corn and grain sorghum farms in the U. S.

As a result of the 1961 program, feed grain production was pulled below use for the first time since 1952. Government costs for storage and carrying charges were reduced from what they would have been if production had continued unchecked.

Under the emergency Feed Grain Programs, 25.2 million acres (about 25 percent) of cropland were diverted to conserving uses in 1961, and farmers have agreed to divert almost 30 million acres in 1962. The program offers incentive payments to farmers who divert acreage from corn and grain sorghums to conserving uses.

Under a similar program for barley, producers have agreed to divert more than 3 million acres in 1962.

Wheat growers have signed up 15 million acres for diversion to conservation use this year under the Wheat Stabilization Program. The total 1962 sign-up in the feed grain, barley and wheat programs is for almost 48 million acres.

Rural Areas Development Program

One of the major agricultural problems facing Secretary Freeman was the development of rural areas, to benefit both farm and nonfarm people living in the open country and in small villages and towns. Under his direction, the Department moved forward to open the way for more job opportunities and, in other ways, to improve the living

conditions of farm and other rural families.

This effort was strengthened by the approval, on May 1, 1961, of the Area Redevelopment Act and the appointment of an Area Redevelopment Administrator in the Department of Commerce. This Act provided for the delegation of major responsibilities to the Department of Agriculture for redevelopment work in rural areas.

Following through, the Secretary mobilized the resources and personnel of the Department for a total program of rural areas development. He established a Rural Areas Development Board with representatives from 13 agencies as members. He named John A. Baker, Director of Agricultural Credit, as chairman of the board. The Secretary also appointed a rural areas development advisory committee of 34 members, representing all rural interests.

The Office of Rural Areas Development coordinates Department activities in support of the Rural Areas Development program.

Technical help, research, credit, long-range planning for soil and water use, conservation cost-sharing, education, and other services of the Department are available for the nationwide RAD effort. By early 1962, about 700 rural counties had been named eligible for financial aid under the Area Redevelopment Act.

All Department agencies have acted to strengthen programs that promote rural area development. This has resulted in RAD organizations in 48 States, Puerto Rico, and American Samoa - with about 1,350 County and Area Rural Committees. And, there are 48 State Technical Panels and more than 1,000 County and Area Panels, with Federal specialists, to help local people.

Rural Housing and Credit Also Improved

As a further step to improve living conditions for rural families, the Housing Act of 1961 provided additional funds and expanded loan facilities for rural housing. The Farmers Home Administration was authorized to make loans to owners of nonfarm tracts in rural areas and small rural communities with up to 2,500 population, as well as to farm owners.

These loans are being used to finance rural dwellings and farm service buildings. Loans are made only to applicants unable to finance these improvements with their own resources or with credit from other sources.

The Agricultural Act of 1961 also made sweeping changes in supervised credit programs of the Department:

Limits were raised on individual farm operating loans. Farm ownership loans were modified to include financing of a broader range of farms.

The emergency loan program broadened to include farmers outside designated "emergency areas." Loans for water systems were authorized to associations of nonfarm rural residents.

Restrictions on loans to small and part-time farmers were removed, and small real estate improvement loans were permitted without a mortgage. In addition, authority to make real estate loans solely for refinancing was made permanent.

Putting Abundance to Work

In his first Executive Order, issued the day after his inauguration, President Kennedy ordered the Secretary of Agriculture to "take immediate

steps to expand and improve the program of food distribution throughout the United States -- so as to make available . . . to all needy families a greater variety and quantity of food out of our agricultural abundance."

Domestic food distribution programs were strengthened in the following ways:

(1) The variety and quantity of foods available to needy families was increased, and the number of persons participating in the direct distribution program increased from about 4 million to over 7 million.

(2) Through the Special Commodities Assistance Program, a start was made to extend the National School Lunch Program to schools having the greatest need for such assistance, but previously lacking the resources to participate. In the first year, such schools served lunches to more than 22,000 children for the first time.

(3) The Agricultural Act of 1961 authorized direct appropriations to finance the Special Milk Program for the five years beginning July 1, 1962, and provided special assistance to make milk available to children in needy schools. More than 5 percent of the fluid milk consumed off farms is used in the Special Milk Program and the National School Lunch Program.

(4) A Food Stamp Plan was inaugurated in 8 pilot areas. Under the Food Stamp Plan, certified needy families purchase Food Stamp Coupons with cash. They receive in return, not only the cash value of the coupons, but additional bonus coupons. These "extras" represent the Government's share in the program. They are to be used to buy additional food, allowing for a broader range of foods, resulting in a more nutritious diet. The number of coupons a family receives depends on

buying habits and food preferences of the family, plus the number of people in the family, their ages, their incomes and other factors.

The coupons are limited to the purchase of food. They cannot be used for soap, matches, or other household aids. Nor can they be spent on alcoholic beverages or tobacco. Imported items -- such as coffee, tea, cocoa, and bananas -- are also excluded.

To obtain a good cross-section, the program is being tried in small, medium sized and large communities, with people of different backgrounds, environments and food-buying habits.

Researchers from Agricultural Research Service, Statistical Reporting Service, and Economic Research Service made before-and-after studies to see exactly how much the program increased retail food sales and improved the diets of welfare families in the test areas.

Participation averages about 142,000 persons a month, total value of coupons issued averages almost \$3.0 million a month, for which participants pay over \$1.8 million a month. In two areas surveyed, 85 to 95 percent of the free coupons represented increased food expenditures; 80 percent of this being animal products and fruits and vegetables.

Centennial

On August 25, 1961, Congress approved a resolution to request the President to issue a proclamation designating 1962 as the Centennial Year of the establishment of the U. S. Department of Agriculture. On May 15, 1862, President Abraham Lincoln signed the Act creating the Department. On August 25, 1961, President John F. Kennedy issued the Proclamation in line with the Congressional resolution.

Secretary Freeman stated that the theme for the Centennial was

"America's strength depends upon a progressive agriculture."

As the opening Centennial event, the World Food Forum attracted international agricultural authorities, and was attended by U. S. leaders in science, agriculture, industry, labor, education, communications, land grant colleges and universities, and government. Special emphasis was given to consumer and urban interests.

The World Food Forum had a fourfold purpose:

- (1) To recognize the pre-eminence of American agriculture and agricultural technology,
- (2) To provide an international exchange of views on current and emerging world problems by world authorities in the fields of agricultural techniques, economics and sociology,
- (3) To advance the application of modern agricultural science in less-developed countries of the World, and
- (4) To signal the 100th anniversary of the U. S. Department of Agriculture.

In his invitation to attend the World Food Forum, Secretary Freeman said:

"I am proud to be Secretary of Agriculture at the time the Department will be completing its one hundredth year of service to our Nation. This will be an occasion for all of us to reflect upon the blessings that have come from the richness of our land and the skill of our people."

